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ABSTRACT

This sourcebook for pre- and in-service teachers suggests global perspectives as an ongoing theme for education. Two underlying assumptions are that people need a global perspective because the survival and collective well-being of all depends upon it, and that professional educators are responsible for integrating global perspectives into the curriculum in ways which help students organize their comprehension of ideas, things, and people and to see holistic relationships. Three major areas are addressed to broaden educator's understandings of global education and its applications: (1) definitions for global perspectives and the need for them in general and global education curricula; (2) global education from humanistic, historical, geographical, political, economical, anthropological, and scientific and technological perspectives; and (3) an overview of instructional methods and materials for global education. (DC)

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PERSPECTIVES OF GLOBAL EDUCATION

A Sourcebook for Classroom Teachers

Edited by
Raymond H. Muessig
and
M. Eugene Gilliom

SE 035 728

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A Sourcebook for Classroom Teachers

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EDUCATION
OSU

College of Education
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Columbus, Ohio
1981

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Cover Photograph

The cover photograph was taken by Raymond H. Muessig at Cranbrook Elementary School, located in the northwestern part of the Columbus City School District. Although most of Cranbrook's 350 pupils in grades K-3 are Americans, there are 35 other countries represented in Cranbrook's families, due in part to the school's proximity to The Ohio State University.

The beautiful children who posed for the cover photograph are, seated left to right, Olga Chwascinska (Poland, kindergarten), Thomas Kang (Korea, 1st grade), and Dina Elhag (Sudan, kindergarten) and, standing left to right, Asami Himori (Japan, 2nd grade), Michael Lake (U.S.A., 3rd grade), and Maria Ramirez (Columbia, 2nd grade).

Children such as Asami, Dina, Maria, Michael, Olga, and Thomas should inspire everyone everywhere on our globe to do everything possible to make the earth an ever-better home for the human family, today and tomorrow.

Acknowledgments

The people whose names appear below have earned recognition and commendation for their contributions to *Perspectives of Global Education: A Sourcebook for Classroom Teachers.*

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RICHARD MURRAY, Principal, Cranbrook Elementary School, graciously secured the models for the cover photograph and the permission of the children's parents.

JAMES E. BLANEY, Director of Marketing, Weber Costello, Chicago, provided the globe used in the cover photograph.

LAVONNE M. MUESSIG lovingly suffered *another* mess all over her normally spotless home while her husband worked on this project.

Raymond H. Muessig

Foreword

Mapping the concepts of global education is analogous to exploring and charting unknown territories. The land forms, flora, and fauna observed by the survey party can be analyzed from each surveyor's perspective; the descriptions will reflect the unique frame of reference of each explorer. Only when a reader can synthesize and integrate these multiple perspectives into his or her own conceptual map will there be coherent understanding.

We often are advised to seek the "patterns of change" as a way of learning the new reality brought about by dynamic social forces. The metaphor "patterns of change" seems too superficial. Turbulent change processes are sculpting rough, uneven, and unfamiliar terrain which educators need to explore. Rates of economic, political, social, and demographic change are accelerating. The terrain before us, therefore, is altered continuously. Moreover, technological advances result in ever contracted intervals of time and distance and altered perceptions of the global condition.

Why a global perspective? Simply, because our individual and collective survival depends upon it. Interdependence of the nations and peoples of the world is part of the changed reality portrayed in this sourcebook. Our collective well-being now and increasingly in the future will be a function of the understandings and skills available to our leadership to resolve intertwined political, economic, and social problems of a transnational and global character. These complex understandings represent value shifts and do not come easily. We trust that future generations will manage better the interchange among peoples and the conflicts generated by the interdependencies. This preferred future will occur only if we begin now to prepare our children and youth for the world they will inherit.

We are responsible as professional educators for intergrating global perspectives into our curricula in ways that permit all students to organize their comprehension of ideas, things, and people and to see wholistic relationships. Global perspectives, as an organizing theme, has the unique capability of enabling us to work in a larger framework with multidisciplinary tools. The global perspective frees us from parochial and chauvinistic interests, enabling us to move beyond mere schooling to education.

While the primary audience for this sourcebook is the classroom teacher, it is clear that thoughtful leaders throughout society need to develop comparable understandings and skills. The editors and authors have learned much in the process of preparing this sourcebook. At The Ohio State University we are infusing into our teacher preparation program many of the concepts discussed here. We plan to increase our attention to global perspectives as an evolving field of inquiry and reflection. Subsequent efforts will be aimed at increasing the quantity and quality of globally-oriented instructional materials available for elementary and secondary classrooms.

Although I, as Dean, commissioned this expedition, it could achieve its goal only under the insightful leadership of editors Raymond H. Muessig and M. Eugene Gilliom and the perceptive authorship of the multidisciplinary writing team comprised of Ojo Arewa, Sr., S. Earl Brown, Michael W. Curran, M. Eugene Gilliom, Diether H. Haenicke, James E. Harf, Victor J. Mayer, Steven L. Miller, and Raymond H. Muessig. I thank each member for his contribution to the success of this venture.

Robert A. Burnham, Dean
College of Education
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CHAPTER 1

The Nature of and Need for a Global Perspective in General and Global Education in Particular

Raymond H. Muessig
Professor of Social Studies Education
The Ohio State University

> "Yes," she said, "Yes. All the coastlines, bays, sounds, capes, and peninsulas, the world's beaches scribbled round all the countries and continents and islands. All the Cannes and Hamptons yet to be. Shores in Norway like a golden lovely dust. Spain's wild hairline, Portugal's long face like an impression on coins. The nubbed antlers of Scandinavia and the great South American porterhouse. The French teapot and Italian boot and Australia like a Scottie in profile."
>
> "Asia running like a watercolor, dripping Japan and all the rest," we said together.
>
> "Yes, yes," she said. "God, I love the world."
>
> "There's no place like it."
>
> Stanley Elkin[1]

Introduction

Gladly Teche, a dedicated teacher for four decades, reached the mandatory retirement age in March of 1981. He reluctantly surrendered the key to his classroom on the ninth day of the following June. Knowing that he would miss his work tremendously, he had devoted months to planning numerous activities to keep away from a rocking chair, including a trip around the world. Wishing to capture some of his travel experiences on film, Teche purchased a Japanese single-lens reflex camera three days ago. His efforts to read and understand the owner's manual supplied with the compact miracle of contemporary technology have met with little success, because

(a) Teche has always admitted to being something of a "mechanical idiot."
(b) the directions may have been translated from Japanese into English with considerable loss of meaning in the process.
(c) the instructions were not clear even in the original Japanese text.
(d) the person who wrote and/or translated the booklet was a show-off, skilled in the dubious art of obfuscation.
(e) the camera really is so complex that its functions defy description.
(f) of all of the above or some combination thereof.

Gladly is particularly puzzled by the section in the owner's manual entitled "Focusing." How is a neophyte supposed to make sense out of a single paragraph containing a jumble of words including *split-image spot, band of microprisms, acute matte field, viewfinder, distance scale ring, focusing collar, aperture,* and *focal length?* Since Teche occasionally has had an aptitude for making desirable discoveries by accident, he decides to place his hope in serendipity. He figures that one eye has to go somewhere. Why not that little "window" up there on the back of the camera? Voila! He can see the kitchen door, but it seems to be a bit fuzzy. Keeping the camera in place with his left hand, the recent retiree uses his right hand to turn all of the "things" that move on the mysterious device. Eventually, Gladly sees the top and bottom halves of the door move back and forth when he changes the position of a plastic "circle." Then, the protagonist of this tale stumbles on the finding for which he has hoped: when any one of the verticle lines in the door is "straight," the rest of the door, the adjacent wall, and the other things Teche can see seem to be clear! If a single item is sharp, its surroundings come into better focus. In an inductive manner, Gladly has proceeded from the particular to the general.

Similarly, an inductive approach influenced the organization of *Perspectives of Global Education: A Sourcebook for Classroom Teachers.* Scholars in specific fields were asked to provide sharply focused historical, political, economic, and other perspectives in particular that would result in a more acute global image in general. Of course, thinking is a highly complex process that involves induction, deduction, conjecture, application, analysis, synthesis, evaluation, intuition, interpolation, extrapolation, and the like in varying degrees, mixtures, and sequences. However, global understanding is by its very name and nature so comprehensive that often it can best be introduced and amplified by objectives, content, methods, materials, and evaluation procedures that progress from immediate to extended, simple to complex, concrete to abstract, known to unknown, as the following item should illustrate.

Farley Mowat, one of Canada's most distinguished professional writers, is the author of *A Whale for the Killing,* a heart-wrenching, true story that centers its focus on Mowat's heroic battle to save the life of an 80-ton finback whale trapped in a Newfoundland lagoon. Additionally, Mowat broadens the reader's range of vision to include the plight of all whales and then every form of life in general on our planet. Like a skilled attorney-at-law, he builds a strong case.

> . . . [E]verything science has discovered has strengthened the conclusion that whales are among the most highly perfected forms of life ever to dwell upon this planet.
>
> . . . [B]aleen whales may be the most long-lived of all mammals, including man. And since they are preyed upon by no natural enemies in adulthood, except, of course, for us, and appear to be singularly free from fatal diseases, they are probably one of the very few non-human forms of life that nature would permit to die of old age, if man did not intercede.
>
> . . . .
>
> Before the most rapacious of predators, the human animal, set about annihilating them in earnest during the 17th century, the eight species of Great Whales are believed to have numbered as many as four and a half million individuals.

> By 1930, . . . they had been reduced to about one and a half million. Less than half a century after that, in 1972, there were estimated to be no more than three hundred and fifty-thousand survivors.
>
> . . .
>
> If the whales are to survive, mankind must declare *and enforce* a world-wide moratorium on the killing of all and any whales. Such a respite must be of at least ten years duration if the terribly depleted stock of Great Whales are to have any real chance to recover. . . .
>
> . . .
>
> Before modern man began his murderous exploitation of the seas, the oceans swarmed with herring . . . and with whales. Now that is changed. Having come close to eliminating the great whales, man is now rapidly doing the same thing to the herring. . . .
>
> . . .
>
> . . . The fond expectation that the seas will feed mankind when the ravaged earth can no longer do so, is no more than an illusion. *Already the seas are being grossly over-fished.* . . .
>
> . . .
>
> . . . [L]ife itself—not *human* life—is the ultimate miracle upon this earth. . . .[2]

The fears Mowat articulates about all living things on our planet could even be extended into the future to enlarge the scope of focus. Released during the writing of this chapter, a report from the President's Council on Environmental Quality says that due to soil erosion, overgrazing, excessive irrigation, contamination of underground drinking water, side effects of chemical pest controls, pollution, tropical deforestation, urbanization, and the like, the rate of extinction of species of animal and plant life could increase to one species each hour in ten years. In the next twenty years, 15-20 percent of all species on the earth could be lost.[3]

Chapter 1 has been written to set the stage for all of the following essays in *Perspectives of Global Education: A Sourcebook for Classroom Teachers*. This first chapter is divided into two basic parts, the first of which focuses on a global perspective and the second of which centers its attention on global education. Each of the two parts is characertized by three subdivisions, a definition of a "global perspective" and later "global education," a statement on the need for a global perspective and global education, and a discussion of some of the ingredients of a global perspective and global education. Before getting into the two major chapter components, a series of quotations—following immediately—has been included to create a feeling, a mood. Chapter 1 is concluded with some statements designed to alert, energize, inspire readers.

Selected Quotations

> No man is an island, entire of itself; every man is a piece of the continent, a part of the main; . . . any man's death diminishes me, because I am involved in mankind . . .
>
> **John Donne**

In spite of differences of soil and climate, of language and manners, of laws and customs—in spite of things silently gone out of mind, and things violently destroyed, the Poet binds together by passion and knowledge the vast empire of human society, as it is spread over the whole earth, and over all time.

William Wordsworth

I see ranks, colors, barbarisms, civilizations. I go among them, I mix indiscriminately. And I salute all the inhabitants of the earth.

Walt Whitman

That person is most cultivated who is able to put himself in the place of the greatest number of persons.

Jane Addams

I do not want my house to be walled in on all sides and my windows to be stuffed. I want the cultures of all lands to be blown about my house, as freely as possible.

Mohandas K. Gandhi

Until you have become really, in actual fact, as brother of everyone, brotherhood will not come to pass.

Fyodor Dostoyevski

I look forward to the time when men will be as ashamed of being disloyal to humanity as they are now of being disloyal to their country.

Woodrow Wilson

Our true nationality is mankind.

H. G. Wells

The salvation of mankind lies only in making everything the concern of all.

Alexander I. Solzhenitsyn

What is the use of a house if you haven't got a tolerable planet to put it on?

Henry David Thoreau

All citizens everywhere hold common stock in the future of both the planet and the human race.

Robert Leestma

We are one hunk of ground, water, air, clouds floating around in space. From out there it really is one world.

Frank Borman

The new electronic interdependence re-creates the world in the image of a global village.

. **Marshall McLuhan**

We are beginning to discover that our problem is worldwide, and no one people of the earth can work out its salvation by detaching itself from others. Either we shall be saved together or drawn together into destruction.

Rabindranath Tagore

Toward a Definition of a "Global Perspective"

In an article entitled "Global Perspectives in the Social Studies," appearing in the 1980 winter issue of the *Journal of Research and Development in Education*, James A. Becker and Lee F. Anderson, two of the longtime pioneers and leaders in the global education movement, state that

> . . . [A] global perspective portrays humankind as belonging to the earth. This . . . image highlights at least four things about human-natural environmental relations: (a) the absolute and ultimate dependence of humankind upon resources found in nature: (b) the limited and finite characteristics of many natural resources: (c) the global nature of the planet's ecosystem: and (d) the importance of trying to adapt human culture to the imperatives of ecological laws which humankind cannot amend or repeal. . . .[4]

Ghulam M. Haniff, a social scientist in a university department of interdisciplinary studies, has this to say about a global perspective:

> . . . It is no longer fruitful to view the planet earth as an infinite land mass inhabited by culturally diverse groups of people living in relative isolation from each other and comprising autonomous communities capable of a variety of activities carried on autonomously. While it is true that members of the human species continue to occupy spatially distinct pieces of real estate and to live in a state of social fragmentation, it is also true that the events of the contemporary world have made them all citizens of a global village—a village in which the sharing of resources and community life has become a social imperative.[5]

Other statements included in this chapter will clarify further and extend the meaning of a global perspective. No comment is necessary here.

The Need for a Global Perspective

To anyone who is the least bit aware of what has happened, is currently taking place, and could occur on this planet and in outer space, the need for a global perspective is so self-evident that this section of Chapter 1 may be unnecessary. However, I would like to include here a little exercise that may involve you, the reader, more actively and may serve as a form of reinforcement, if nothing else.

Please stop reading this chapter long enough to secure about twenty 3" x 5" cards. Or, take sheets of 8½" x 11" paper and cut or tear them into twenty strips 8½" x 2". On each card or strip of paper write *one* crisis, problem, dilemma, concern, event, change, development, prospect, challenge, whatever, that you feel has global ramifications and requires the attention of humankind on a worldwide scale. You may use a single word, a phrase, or a sentence or two to identify each of the items—categories, if you will—that occurs to you. Next, using the top of a table, a kitchen counter, or a section of floor, arrange the points you have recorded on the cards or slips of paper in order of their importance, putting the most crucial thing first. You should find this rank-ordering difficult, indeed, and you may discover that many of your points overlap, are interdependent.

As a teacher and a teacher educator the past quarter of a century, I have tried as often as possible to "put up or shut up," to carry out myself the assignments I have given to others. Therefore, I have developed my own list in the manner I have suggested above. At this stage, then, I invite you to compare your items and the rank you assigned them with my points and the order in which I arranged them. I wish that you and I and a number of other people could discuss our lists. I suspect that our exchange of ideas and feelings might result in a consideration of additional items, some new categories, in a hierarchial rearrangement, and so on. I doubt that we could reach complete agreement on a master list, but we might see the need for a global perspective once again or even more.

Having indicated my willingness to reconsider, amend, amplify, recombine, and reorder the items that came to my mind, here is my list, in sentence form:

1. Surely the impending explosion of the world's population—with the very real possibility of mass starvation and all—deserves consideration as an item, though I am not at all sure whether I should have made it my first concern.
2. The rapid depletion of earth's scarce, exhaustible resources became my second point, after I had shifted items around a number of times.
3. Perhaps you share my apprehension with respect to the continuing arms race and the threat of a war—nuclear, chemical, microorganic, etcetera—that could be so total and so destructive that whatever remains might just as well have perished.
4. Most lists would doubtless include worldwide environmental pollution.
5. I used the preservation and extension of human life, rights, dignity, and worth as a comprehensive category. It seemed to me that love, freedom, equity, security, health, happiness, altruism, open opportunity, and the like could contribute to planetary human fulfillment. For the sake of emphasis here, I included hate, enslavement, injustice, insecurity, disease, pain, anguish, hunger, homelessness, greed, materialism, exploitation, chauvinism, racism, ethnocentrism, sexism, ageism, anomie, and alienation among the enemies of self-realization for humankind.
6. Humankind's disregard for nature's magnificent, yet delicate, design—including the destruction of mutually beneficial, balanced animal and plant species all over the globe—became another consideration.
7. Although the expression is trite, I did not feel that I should omit the "smaller world" idea. With good and bad outcomes, radical changes in transportation and communication have brought the peoples of the world closer together, increased their interdependence, emphasized specialization with gains in comparative advantage and losses in autonomy, facilitated the growth of multinational corporations and agencies, and so on.
8. Most people in so-called "developed"[6] nations probably believe that their lives are better on the whole because of science and technology. However, there may be growing disenchantment with certain ideas held for a long time by countless members of the human species. Questions such as these are becoming more insistent: Should all scientific and technological *change* be equated with *progress*, especially improvement for *every* inhabitant on the earth? Should everything that is possible scientifically and technologically be attempted, regardless of anticipated and unanticipated consequences? Should science and technology serve the philosophy of "unlimited growth"—where funds may be more abundant for research and development—, or should a "less is better" principle predominate?
9. What about outer space, the other planets, asteroids, ad infinitum beyond earth's atmosphere in the solar system? Which earthlings get to explore and to use outer space and for what purposes? Does the entire universe "belong" exclusively to those nations with the technology to get "out there?" Should outer space be polluted with the garbage of explorations, used for satellites with detection systems and weapons, etcetera?

10. My list concludes for now with the highly complex problems associated with transnational government and the resultant reduction of national sovereignty.

How did you do? How did I do? How did we do? Do our mutual lists leave considerable doubt about the need for a global perspective?

Some Ingredients of a Global Perspective

This portion of my essay identifies and discusses briefly six ingredients of a global perspective that I consider to be among the most important and helpful for teachers. The first is a "spaceship earth"—ecological way of viewing the world. The unity of the human species and the diversity of cultures is my second component. Third, the interdependence of human relationships has been included. The idea of multiple loyalties appears as the fourth element. The fifth constituent concerns human rights. Futurism is sixth.

"Spaceship Earth"-Ecology: Although people who labor in the global education vineyard are familiar with Barbara Ward's *Spaceship Earth*, the following passage should be new and useful to many of the inservice teachers and most of the preservice candidates who read this publication:

> . . . I can think of only one way of expressing the degree to which interdependence and community have become the destiny of modern man. I borrow the comparison from Professor Buckminster Fuller, who, more clearly than most scientists and innovators, has grasped the implications of our revolutionary technology. The most rational way of considering the whole human race today is to see it as the ship's crew of a single spaceship on which all of us, with a remarkable combination of security and vulnerability, are making our pilgrimage through infinity. Our planet is not much more than the capsule within which we have to live as human beings if we are to survive the vast space voyage upon which we have been engaged for hundreds of millennia—but without yet noticing our condition. This space voyage is totally precarious. We depend upon a little envelope of soil and a rather larger envelope of atmosphere for life itself. And both can be contaminated and destroyed. Think what could happen if somebody were to get mad or drunk in a submarine and run for the controls. If some member of the human race gets dead drunk on board our spaceship, we are all in trouble. This is how we have to think of ourselves. We are a ship's company on a small ship. Rational behavior is the condition of survival.[7]

In *International Learning and International Education in a Global Age*, Richard C. Remy, James A. Nathan, James M. Becker, and Judith V. Torney have this to say:

> The "spaceship earth" view of the world is an essentially ecological image of international affairs. Ecology's "Way of seeing" has shown us how the chain of life is interrelated and interdependent: neither the ocean, the air, the land nor animal life which inhabit all of them can be "independent." An ecological metaphor unites the seemingly distinct domains of biological activity—the ocean, the air, the soil and the life which inhabit them—into interrelated concepts. The global system metaphor highlights transnational behavior or that behavior which is beyond or breaks out of the definition and boundaries of "security policy" or "foreign policy."[8]

Lyton K. Caldwell's *In Defense of Earth: International Protection of the Biosphere* also contains relevant comments:

> For modern man to survive in a finite world, he must restrain insatiable demands upon the natural environment and treat that environment with the

respect and care that he would give his life-support system were he a passenger on a spaceship. Self-control has now become the quality essential to the individual and society alike, since man has become the greatest threat to his own survival and development.[9]

Unity with Diversity: Over thirty years ago, Clyde Kluckhohn, Professor of Anthropology, Harvard University, wrote these words:

> *. . . Anthropology holds up a great mirror to man and lets him look at himself in his infinite variety. . . .*
>
> . . .
>
> *. . . World uniformity in culture would mean aesthetic and moral monotony. The anthropologist's solution is unity in diversity: agreement on a set of principles for world morality but respect and toleration for all activities that do not threaten world peace. . . .*
>
> . . .
>
> *Human life should remain as a home of many rooms. . . .*[10]

Over a decade ago, M. Louis Francois, Inspecteur General de L'Instruction Publique of France, said,

> Active tolerance demands qualities of modesty, flexibility, perspective and awareness. It involves the courage to ask: "Whither my own society and why?" "Whither my own religion and why?" "To what extent do I or does my country behave and act to frustrate the essential dialogue?" It is possible that a willingness to ask such questions might enable the great differences between men to be brought into a state of active tolerance. Men might then see that the centripetal force of their common universal human nature was far stronger than the centrifugal force of their different ideologies and racial-cultural patterns. Thus a new Humanism might induce men to reconcile their differences in a common struggle against hunger, disease and ignorance which blight the lives of so many of their members. Our task is to make the world safe for diversity. A united, not a uniform, world is our goal. The world will henceforth live or die together [11]

Seymour H. Fersh has observed that "Anyone whose life is restricted to knowledge only of his own culture does not share in his birthright as a member of the world community."[12] And, James M. Becker says that we should view humankind as a "single species, though with a great diversity of cultures" and recognize "some of the forces which push man toward cooperation and the integration of his institutions as well as those forces which make men defensive. . . ." He adds that we must see the "need for wider and more varied human indentity than has been provided by the nation-state in the past."[13]

Interdependence: With respect to our increasingly interdependent human relationships on earth, Barbara Ward has written the following in *Spaceship Earth* and *The Home of Man*, respectively:

> . . . The greatest institutional gap in our world is created by an inescapable, planetary, interdependence which breeds common grievances and creates common needs and opportunities, yet is matched by virtually no instruments of worldwide order and welfare. And it is through this gap that mankind can tumble into annihilation.[14]
>
> . . . [W]e can now talk to the ends of the earth as easily as villagers once conversed with each other. Our planetary interdependence is as great as that of earlier states. Our knowledge is world-wide. Our airs and oceans are equally shared. So are all the preconditions of material existence. . . .[15]

Norman Abramowitz, Andrew J. Leighton, and Stephen Viederman point out that

> . . . "[I]nterdependence" is not a new phenomenon. What is new is the frequency and number of interactions with others, as well as a heightened perception and awareness of these interactions. In addition, there is a growing recognition of the complexity of the relationships and the processes involved in them. . . .[16]

Employing an interesting play on words, historian Henry Steele Commager has issued "A Declaration of Interdependence" that reads in part

> When in the course of history the threat of extinction confronts mankind, it is necessary for the people of the United States to declare their interdependence with the people of all nations and to embrace those principles and build those institutions which will enable mankind to survive and civilization to flourish.[17]

Multiple Loyalties: A single sentence helps set the tone for this portion of my essay. In an article published in 1968, Herbert C. Kelman suggests that "It is not a matter of transferring loyalty from a smaller to a larger unit but of entertaining multiple loyalties."[18] Becker agrees.

> Unless men are willing and able to work in groups, they cannot long survive as individuals. Conformity to local habits and customs is necessary, but in modern times, every individual is a member of many different groups, each claiming his loyalty. At times, conformity to one group seems to conflict with the interests of other groups. Multiple loyalties and multiple membership in a variety of formal and informal groups enable individuals to help mediate some such conflicts. Increased interdependence and transnational participation create conditions which undermine the nation's demand for total loyalty to the state.[19]

Barbara Ward and Rene Dubos develop the following line of reasoning in *Only One Earth: The Care and Maintenance of a Small Planet:*

> . . . The planet is not yet a center of rational loyalty for all mankind.
>
> But possibly it is precisely this shift of loyalty that a profound and deepening sense of our shared and interdependent biosphere can stir to life in us. That men can experience such transformations is not in doubt. From family to clan, from clan to nation, from nation to federation—such enlargements of allegiance have occurred without wiping out the earlier loves. Today, in human society, we can perhaps hope to survive in all our prized diversity provided we can achieve an ultimate loyalty to our single, beautiful, and vulnerable planet Earth.[20]

Edwin O. Reischauer's *Toward the 21st Century: Education for a Changing World* also contains relevant passages.

> The sense of world citizenship need not and should not replace a sense of national identity or a feeling of loyalty to the still smaller groupings within society. The latter have succeeded quite well in co-existing with the nation state. . . . Time after time in history, the smaller group—the family, the tribe, the city state—has been forced by changing conditions to subordinate its hitherto exclusive sense of self to a broader unit of overarching common interests, though without losing its own identity in the process. This is what is required once more, but on a global scale. . . .
>
> . . .
>
> . . . [A]t this time, when the world community is rapidly superseding the nation as the ultimate unit of human cooperation, we do so little to build a sense of identification with the whole human race and emotional attachment to a world community. Such attitudes will be necessary if the global unit is to serve as one of survival rather than destruction. . . .[21]

Human Rights: I have turned again to *The Home of Man* for these eloquent statements pertaining to the area of human rights:

> . . . [A]ny valid concept of dignity and equality includes a number of nonmaterial "goods"—responsibility, security, and participation, the free exchange of

> thought and experience, a degree of human respect that is independent of monetary rewards or bureaucratic hierarchies . . . All these goods of culture, of man's mind and spirit, need not be costly in terms of material resources. Indeed, they belong to the sphere of life where growth is truly exponential—in knowledge, in beauty, in neighborliness and human concern.
>
> . . .
>
> . . . If the right to shelter is a basic human right, it cannot be fully enjoyed unless there are corresponding rights to community, or rather to those human benefits which can only be provided by a community.
>
> Some of them are social—health, literacy, employment, personal security. Some of them are physical—pure water, good drains, clean air, access, and mobility. Some are cultural—freedom of expression and choice, continuity, responsibility, effective influence, beauty, great art, the right to visions and dreams. They are all, given the inescapable nature of reality, inextricably bound up with each other. . . .[22]

Futurism: Here are two selections germane to my sixth ingredient of a global perspective:

> Future studies techniques and approaches seem promising in that they treat human behavior as a process of continuous creation—making choices which affect future choices—not as an accretion of facts or data from the past, a viewpoint that tends to imprison alternative futures in perceived pasts. Rather than emphasizing what is deterministic and random, future studies affirms the nondeterministic and creative.[23]

* * *

> Future studies is a convenient device . . . because it considers the entire globe as a system, data about which may be used to forecast possible alternative futures. There are many elements of future studies and global studies which overlap, such as the concern for creating world order and ensuring a peaceful future for humanity. . . .[24]

Global Education

Toward a Definition of "Global Education"

Some of the leaders in the movement define "global education" as

> . . . education for responsible citizen involvement and effective participation in global society.[25]

* * *

> . . . an effort to create educational systems in which children, youth, and adults come to do two things. On the one hand, students learn to perceive and understand the world as a single and complete global system: on the other, students learn to see themselves as participants in the world system and to understand the benefits and the costs, the rights and the responsibilities, inherent in such participation.[26]

* * *

> . . . helping citizens—young and old alike—develop the problem-solving capacities associated with making thoughtful decisions; it involves helping people develop the skill to make reasoned judgments about their own international behavior and the decisions and actions of others; it involves helping people develop the capacity to exert some influence over international social and economic processes in which they are inevitably involved in daily life.[27]

The Need for Global Education

Reischauer has called for "a profound reshaping of education if mankind is to survive in the sort of world that is fast evolving."[28] "Before long," he writes, "humanity will face many grave difficulties that can only be solved on a global scale."[29] This situation necessitates "a much higher degree of understanding and a far greater capacity for cooperation between disparate peoples and nations than exist now."[30] Unfortunately, education "as it is presently conducted in this country—and in every other country in the world, for that matter—is not moving rapidly enough in the right direction to produce the knowledge about the outside world and the attitudes toward other peoples that may be essential for human survival within a generation or two."[31] As Reischauer sees it, the inadequacy of contemporary education "is a much greater international problem than the military balance of power that absorbs so much of our attention today."[32]

"Seeing the world as a whole rather than as a collection of units, scrapping the segmented view of earth and the bits and pieces approach for a global view of the world, recognizing that despite the great diversity of cultures and peoples there is a basic unit," says Becker, "is a major challenge in preparing students for the emerging world society."[33] Charlotte J. and Lee F. Anderson agree with Becker.

> In a global age when worldwide interdependence makes itself felt in the daily lives of most citizens, it is critical that individuals learn to exercise some control and influence over the transnational problems, institutions, and social processes that impinge upon their well-being and the well-being of other members of the human species. Schools, we believe, can assist individuals in developing some competence in exercising influence within the context of global society.[34]

Robert Leestma reveals his commitment to global education in this statement:

> In no country today does education correspond sufficiently to the reality of world conditions, events, and issues. Given the nature of the contemporary world and the foreseeable future, every educational system should reflect much more adequately than it currently does such matters as the unity and diversity of mankind, the interdependence of nations and peoples, and the need for international cooperation in shaping an acceptable future.[35]

World Society, written by John W. Burton of University College, London and published by Cambridge University Press, contains the following:

> . . . The study of world society needs to be built into educational systems, just as in mathematics, language, health and road safety. Only then will people be able to assert their estimates of how much should be spent on defence and how much on education and health, and in this way check the judgments of political leaders.[36]

Caldwell has an interesting ecological viewpoint and a strong stand.

> . . . [F]or the most part the ecological integrity of the Earth must depend on new and younger men and women for the leadership required. Formal public education must help produce a new leadership that is ecologically oriented, for, in a techno-scientific age, young fogies are even more dangerous than old ones. They are more vigorous and they may be ambitious.[37]

Kelman endorses global education, though he offers a caveat regarding the possible indoctrination of "internationalist values."

> In the light of changing realities, it is the role of the schools to prepare students to understand the nature of the global society that is developing and to function within it. I do not mean that schools should deliberately foster internationalist values, but they should enable students to obtain a realistic picture of the extent to which we are in fact living in a global society and of the conse-

> quences of organizing various functions in a transnational as compared to a national way. I assume that this would make internationalist values a more viable option for the new generation of citizens. . . .[38]

In an article titled "A Global Perspective: The New Imperative," Ernest L. Boyer, U.S. Commissioner of Education at the time of publication, opined that education must "focus on a new curriculum, one that gives us a clear vision of the unity of our world, in both a social and a physical sense. Education must teach us that all our actions on this planet, physical or social, are irrevocably interlocked."[39]

Some Ingredients of Global Education

Having offered some definitions of "global education," and having provided arguments in its favor, I am now ready to turn to certain of its properties. As I see it, there are at least three aspects of global education that should be mentioned in this paper. These three ingredients overlap and could be combined into a single statement, but emphasis is warranted. First, the availability of global education to all children and adults as continuously as possible is discussed frequently in the literature. Second, the subject matter of global education is most often treated in a multidisciplinary fashion. Third, the instructional media suggested are rich, variegated. Since Professor M. Eugene Gilliom, my colleague in social studies education and my co-editor here, concludes this publication with an entire chapter devoted to specific methods, materials, and the like associated with global education, the treatment that follows is brief and general.

Availability: A number of writers involved in global education have expressed the belief that genuine worldmindedness requires a lifetime of living and learning, long-term growth as a result of myriad, accessible experiences acquired in the home, extended family, neighborhood, church (synagogue, temple, etc.), recreation center, school, community, city, state, region of states, nation, other countries, continents, the planet, and—perhaps to a progressing extent—the solar system. There is a sense in which every person should be both a learner at some times and a teacher at other times so global education can take place on a womb-to-tomb basis.

Subject Matter: Leonard S. Kenworthy's farsighted book *Introducing Children to the World: In Elementary and Junior High Schools,* published in 1956, said that

> World-mindedness is not a monopoly of any grade level or of any subject field. Any effective program needs to include a wide variety of experiences for every grade and every group of children no matter what their ability is. *All* children are going to live in the world and all of them need an introduction to the world-wide society as well as to their own community and nation.
>
> . . .
>
> It is no simple task to introduce boys and girls to this vast, complicated, chaotic, changing world community. It cannot be done by adding another subject to the already overburdened curriculum; it must be done by having the world dimension added to all phases of existing subjects. It cannot be done by the social studies field alone; it must be done by work in all fields. . . .[40]

Possibilities for fostering a global perspective exist in every subject area from art to zoology, and they are present from kindergarten to the twelfth grade and before and after formal schooling. Social studies educators and classroom teachers may have been among the first to see opportunities to nourish worldmindedness through history and the social sciences, but they have been and are being joined by others in numerous disciplines.

Instructional Media: People who are deeply committed to global education hope to reach all children and adults. Obviously, these children and adults have heterogeneous needs, interests, abilities, talents, advantages, handicaps, problems, aspirations, and so on. It follows, therefore, that innumerable methods and materials must be tailored to individual differences. Included in a long, long list could be lectures, discussion, buzz sessions, role-playing, simulations, games, resource persons, fieldtrips, study tours, exchanges of students and others, extended residence in other places with various peoples, newspapers, periodicals, bulletins, books, textbooks, bulletin boards, displays, learning centers, paintings, photographs, slides, filmstrips, films, records, tapes, videotapes, television programs, plays and other performances, timelines, charts, graphs, maps, globes, models, kits, realia, artifacts, and many other things that have doubtless occurred to you.

Conclusion

I decided that the dedication in Richard A. Falk's *A Study of Future Worlds* would be a fitting way to close my chapter. Just as Falk's sons, Dimitri and Noah, provided him with "a continuous rationale for trying harder to build the case for global reform," so also I had my sons, Scott and Jim, in mind when I chose to include the following:

So that my children
and your children
and all children
might live
in a future world
that is peaceful and fair
that is mindful
of nature
and that is hopeful
about the
material and spiritual
development
of humankind.[41]

NOTES

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CHAPTER 2

A Humanistic Perspective

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Introduction

My father was born in 1882. He spoke several languages and was considered a widely traveled man; yet he never left the European continent. When he was a young man, the map of the earth still showed some white spaces: *terra incognita*. Neither the North nor the South Pole had been explored, and even Tibet and distant regions of India had not been mapped and remained areas from which only occasionally mysterious reports flowed into the literature of the time. He was forty-six when in 1928 the Atlantic was crossed by plane from East to West, a flight that took more than 35 hours. When he died in 1956, my father had never taken a passenger flight in an airplane. He had never learned to drive an automobile, nor had he ever looked at television.

I often let these observations pass before my inner eye when I want to demonstrate to myself and to my children how much the world has changed in just one hundred years, how much smaller it seems to have become, and how much closer people all over the world have moved together. When my father had to inform his brother in New York in 1909 that their father had died he wrote him a letter, and the news arrived several weeks later in the United States. A response to a letter could not be expected earlier than a full month later. Today, one would transmit the message by phone via satellite within minutes or even seconds. All these changes have not occurred since some distant historical past, but during the life-span of just two generations.

The astounding changes which have brought us instant news communication between all parts of the globe and easy and affordable transportation to any major city on earth are all due to the enormous strides made by science and technology during the last ten decades. Most of the advancements have been welcome and good, particularly those that have helped to eradicate disease and to abate hunger in many parts of the world. However, all technological changes have been introduced without consideration of their relative value, or their ecological impact, or their possible effect upon the social structure of our society. Only recently have we begun to discover that our uncontrollable, unsatiable appetite for manufactured goods of little value and for non-essential amenities has caused our rivers to be polluted, the air we breathe to be hazardous to our health, and has rendered endangered many species of plant and animal life.

Yet the environmental concerns are almost overshadowed by even greater apprehensions. We can proudly state that this country exemplifies technological progress and know-how. For many decades we have exported our knowledge all over the world. The export of goods and expertise was usually accompanied by our good faith attempt to also sell the "American way of life." By this we meant the proliferation of our political beliefs and of our political system of democracy; but to many people it also meant the export of unbridled consumerism, of cultural elements and societal mores alien to other civilizations. We have been increasingly surprised, in many cases bewildered, that our good intentions have not been recognized as such, and that our offers of help and advice have been interpreted as unwarranted interference in the internal affairs of other nations. Rather than withdraw like unrequited lovers into a political position of isolationism and insularity, we must examine why matters have taken this turn and what we as a nation can do to create a future in which the USA, a world power in economy and in military might, does not stand alienated and isolated in a hostile world. For this we have to rethink our positions and must strive for a broader and less one-sided view of the modern world. The humanities can make a valuable contribution towards this goal.

The Humanities

Before we examine possible areas of learning in the humanities that gravitate towards a global perspective it is necessary to reach a common understanding of what the humanities are. For our purposes here the humanities shall be understood as those disciplines which are concerned with human self-expression either through language or the arts. In their languages the people of this world preserve for subsequent generations the tradition of their thought and wisdom, both secular and religious. They hand down to their children a written record of the events that took place before them and during their lifetime and an account of how they influenced and affected them. Their writers and poets record the wide range of human experiences that provide the common bond for all mankind: love and passion, selflessness and egotism, loyalty and betrayal, the joy of living, the agonies of aging, the existential fear of dying, the hybris and the humility of man, fear and courage, and the ultimate greatness of man. The sum of all thinking, of chronicles and feelings is carried by language, and it is therefore appropriate to say that the humanities are language centered. The arts are a close cousin to the humanities, because they too are concerned with human self-expression through the medium of painting, architecture, music and the performing arts. The altar paintings of the medieval masters, the temples in the Asian jungle, the grandiose castles of feudalistic Europe, the Acropolis of Athens and the architecture of our nation's capitol are all manifestations of human self-expression and are symbols of the relationship of man to larger intangible concepts. For the purposes of this essay we will understand the humanities in this broad comprehensive view.

A New Approach to Teaching Civilization and Philosophy

Recognizing that the world has shrunk and that a global perspective is necessary for our citizenry to obtain, we must ask how the humanities can contribute to this new and enlarged view of the world. Should we add courses in Asian philosophy to those already taught in Western thought? Should we add courses in culture studies from other parts of the globe to those in Western civilization? Should we increase the study of foreign languages? Do we need more exhibits of African art? The answer is: All these efforts would be helpful, but the approach to teaching a global perspective is much more radical and fundamental than adding non-Western curriculum content or making merely cosmetic changes.

The new beginning will have to lie in a different approach to the introduction and presentation of any new material in our field. The humanities, we should always remember, deal with human self-expression in general, i.e., we are dealing with humankind as a whole, not a particular nation or group bound together by a common history or language. When we taught history in the past we taught essentially our own national history; beyond that we would at best introduce a brief survey of ancient Greek and Roman and perhaps a glimpse at the history of the modern nations of Western Europe. When we taught literature in the past we concentrated pretty much, not unlike in our historical surveys, on a chronological survey of the great authors of our own country including several English writers. The same can be said for studies in philosophy and in many areas of the arts. Generally speaking, our approach has been informed by our own cultural sphere and has been chronological/historical. This view we would now hold as limited and parochial. The global perspective attempts to transcend the national boundaries and even the larger realm of the cultural sphere. The new perspective has to open the broad panorama of contemporary events all over the world. In the study of history we should not look at the chronology of a national history; we should review the historical/political events worldwide at a certain moment in time. In other words: We should prepare horizontal profiles rather than drop a historical plumbline vertically into the centuries.

I was taught a lesson long remembered about this proposed methodology twenty years ago when a global perspective was still considered unusual. When I prepared for my oral exams for the doctorate I presented myself to the university's premier historian who was to examine me in history. As we discussed the upcoming orals he suggested that I select a particular century for the exam. I would then be more certain of the subject matter, he maintained, and he in turn would be able to go into greater depth and detail. Delightedly I accepted, choosing the 17th century. When the day of the exam arrived I recognized the mistake I had made. I had assumed, as everyone in those days would have, that the discussion would be about 17th century German history and more specifically about the great Thirty Years War which devastated the European continent during that period. Instead, the exam quickly turned to the Pilgrim fathers, religious persecutions in other European countries, the colonialization ventures of the English, the French, the Dutch and the Spanish all over the world, the development of newspapers, the budding coffee trade, the state of medical science, and the introduction of new forms of taxation in the old and the new world. "History is world history," I was told, and ever since I have held to that view. Surely, the world events were tightly interconnected in the 17th century; how much truer is this for our own century!

Our proposed approach should, then, be substantially different from the Western Civilization course approach which all too narrowly confines the historical viewpoint to a group of nations held together by a shared Judeo-Christian tradition. Instead, appropriate consideration should be given to the observation that at the boundaries of the Western civilization system other cultures were rising and developing, most notably that of the Arab world which customarily only steps into the historical scene as an intruder when the Turks beseige Vienna or the Arabs take possession of the Iberian peninsula. The moment they are driven from European soil they disappear again for many centuries at a time. Western intrusions into their territory through colonialization and imperialism are seldom chronicled. Only recently have historiographers begun to provide insights into the effects "our" history has had on Asia, Africa and South America and on the native inhabitants of our own country. The study of the effect of colonialization and of 19th century imperialism on the countries which we have come to call the "Third World" is extremely important for the understanding of the reservations, ill feelings, mistrust, and even hatred many of these nations hold for the West. There is not much use in constant breast-beating over the often cruel acts committed with both thoughtlessness and ruthlessness by our forebears. The study of worldwide perspectives, however, has to lead us to realize that our civilization's impact on the rest of the world has been ambiguous, bringing both technological, economic and medical advances but also being at times destructive to and without any regard for foreign lives and for the indigenous cultures and their inherent values.

A second major task is to raise an awareness in our students that judgments on the relative superiority of some cultures are at best dubious. Great emphasis should be put on demonstrating the richness and complexity of other cultures and their spheres of influence around the globe. Here the sister disciplines of the humanities, namely art, architecture, city planning, music, dance, etc., can lend powerful color to the canvas on which we paint the broad historical picture. We need to teach the rise of thought and the perfection of the philosophical systems of the Arab world which during many centuries preserved philosophy and scientific insights of European antiquity and which for long periods vastly surpassed that of Europe in its sophistication. Our students should appreciate the advanced state of the arts, of science, of many crafts and of religion and contemplative thought in the history of East Asia which is still a mysterious region to most Westerners even though the West has been deeply involved in that part of the world through three major wars.

A global perspective in these studies should not only bring about a more realistic understanding of the dominating role and impact the Western nations have had on major parts of the rest of the world (mainly the Third World), it should also foster a strong appreciation of and respect for the cultural, and in many cases social and political, accomplishments of other civilizations and their influence on our own. If successful, this double strategy would doubtlessly lead to a deepened understanding which in turn might initiate improved relations among culturally diverse but interdependent neighbors.

The Teaching of Literature

The methodology which I would suggest for the teaching of history also applies with some appropriate modifications for other subjects in the humanities. Let us first direct our view to the teaching of literature. In teaching literature we pursue a variety of goals. Predominant among them, however, are two. We look at a play, a novel, or a poem, assessing its esthetic properties; we look at style, metaphor, imagery, structural elements, and we look at the idea, the "message" expressed in the literary work of art. Beyond that we look at how people in these different works of literature live; how they relate to one another; what events, character traits, or social conventions guide and influence their lives; what their general economic conditions are; how they react to and cope with their environment, physical and historical. On this second level of observation, literature becomes the carrier of information and messages from different times, from other parts of the world, from unknown strata of our own as well as foreign social structures, and from value systems that may be very familiar or frighteningly alien to us. The global perspective approach can of course seize upon both of these aspects of dealing with literature. It can be highly rewarding and informative to compare structural elements of Western and the Chinese opera, Japanese Nô plays and British dramas, African epic narration and chronicling and the Homeric poems, etc., and to gain insight into the cultural esthetics of literary art in various civilizations. However, this approach is by necessity limited to persons with sharply honed skills in literary criticism.

It is the second level of approach to a piece of literature which yields the best returns for a global perspective. As in history, our teaching of literature has largely been restricted to national literatures. Again, we have to transcend these narrow bounds and introduce broader topics and themes that lend themselves to the desired viewpoint. I suggested in my opening remarks on the humanities that they essentially deal with human experiences and feelings which are fundamental to the human condition. Our teaching should take as its base the assumption of sameness among all human beings and all human societal or political organizations, and it should show at the same time the differences which are often only different outward manifestations.

By selecting a series of books with a similar theme from different times and/or cultural spheres one can illustrate this point quite well. Since love stories deal with the most universal theme in literature one should select in a reading course some five or six novels that deal with this topic in our society, in another closely related one (perhaps Europe) and then at least two or three from cultures with different social rituals, conventions, and taboos. The more contrasting the examples, the better. The reading of such novels would without doubt demonstrate to our students the stunning differences which exist among our culture and others on many levels of social interaction. One can look at the vastly different ways in which young men and women chose marriage partners—from arranged marriages to the system of completely free choice which most Americans would instinctively deem superior. Or one can observe the general differences in the woman-man relationships in different societies, or the striking differences in the various forms of family structure which may offer, in other societies, the utmost personal restriction and even subjugation but also ultimate protection and security for the individual. Another quite important aspect would be a view of the almost opposite ways in which persons of old age are treated in different societies, ranging from veneration and respect to almost complete neglect and isolation. The greatly contrasting sexual mores of other cultures can be examined, or the value system that each culture has erected based on its tradition, its societal needs, and its religious beliefs all of which often mutually inform each other.

I am choosing the contrastive reading of novels as one possible approach. One might select a multitude of other literary genres, for instance: plays showing thematically the topic of human conflict, beginning with the classic one between loyalty to oneself and to one's own moral beliefs and the demands of the larger societal order, usually the state. This theme is a major one in the literatures of all peoples. Or one can choose poems from all times and periods which reflect the suffering of human beings in periods of great fear and distress, most typically in times of war. The examples are as obvious as they are endless. They can be extended into many other areas of reading that lie either outside of or at the borderline of literature. I am now referring to autobiographies which are often a fascinating mirror of social mores and conventions. Autobiographies of important contemporary figures from other countries will often reveal how we are looked at by others. Next to biographies, the holy books and religious texts from other cultures offer a fine introduction into the comparison of neighboring but culturally different peoples. Recently, we have introduced films into our curricula as a relatively new art form which also lends itself well to offering information and material for cultural comparison. The movie medium has had the added advantage that it offers visual images which tend to find easier access to our students than the impressions created through literature.

Be it pure literature, biographies, philosophical and religious tracts or motion pictures, the common theme should be selected in such a fashion that broad transnational, indeed, transcultural observations and comparisons can take place. The outdated approach which limits the teacher and the students to a linear development of a theme through various historical periods in but one national literature should be abandoned. Broad transcultural comparisons will lead to a realization of the enormous differences which literature reveals with regard to the life-styles, the beliefs, the traditions to which people adhere in different cultures.

This realization is the first level of insight the teacher of the humanities hopes to reach in his students. The next step should be to bring the student to the understanding that many of these glaring differences appear stronger in their outward appearance than they truly are. The student can be made aware that underlying most of these differences is a great sameness when he recognizes that all people, no matter what their social mores and conventions may be, strive for the same basic happiness and human fulfillment, for love, respect, security and dignity in their human existence. After the unlikeness has been observed, the likeness must become apparent, the common tie that binds humankind together. If this goal is accomplished, the student will have reached the increased appreciation for cultural value systems other than his own; and, having recognized or sensed the sameness of human desires and intentions, the student will experience a heightened understanding and an informed respect for the otherness of the foreign. With this result, the humanistic education has moved the student towards a global perspective in his general outlook on the world. One may hope that in small measure this changed viewpoint has broadened the student's preparedness for improved transcultural relations.

The Teaching of Foreign Languages

In conclusion, I must deal briefly with one last area of humanistic learning which almost more than all the other areas will bring about broadened perspectives in a young mind. I am talking now about the learning of foreign languages. Alarmed by the poor linguistic ability among high school and college students in the USA, a Presidential Commission was charged two years ago with assessing the needs for foreign languages study and developing practical recommendations. In their *Report to the President from the President's Commission on Foreign Language and International Studies* published in November 1979 the commission members write:

> Americans' incompetence in foreign languages is nothing short of scandalous, and it is becoming worse. Historically, to be sure, America's continental position between vast oceans was a basis for linguistic as well as political isolation, but rocketry as well as communications satellites render such a moat mentality obsolete. While the use of English as a major international language of business, diplomacy and science should be welcomed as a tool for understanding across national boundaries, this cannot be safely considered a substitute for direct communications in the many areas and on innumerable occasions when knowledge of English cannot be expected. The fact remains that the overwhelming majority of the world's population neither understands nor speaks English, and for most of those who learn English as a foreign language, it remains precisely that. Our vital interests are impaired by the fatuous notion that our competence in other languages is irrelevant.

The commission report views the problem largely as a concern for national security and for a potentially decreased ability to compete with other industrial nations on world markets. Although I share that concern, I should rather like to emphasize the less applied aspect of foreign language study which relates more appropriately to the concern of this paper. There cannot be a global approach to the study of a foreign language in any strict sense. However, the serious study of any foreign language reinforces in the strongest possible way many of the attitudes that I suggested we foster in our students. I proposed extensive cross-cultural readings. I expected that this activity would heighten one's sensitivities to other cultures. I firmly believe though that a complete penetration of any other culture is only feasible through commanding the language which preserves and transports this culture's ideational content and its modes of thinking. Only through the language which carries the entire cultural content of another nation can we reach the ultimate understanding of the complexity, the subtleties, the richness but also the limitations inherent in another culture. Translations are of course always acceptable, most often out of simple necessity. But any bilingual person knows that the *Declaration of Independence* in a German translation is not the same noble and inspired document that it is in English, and that the English version of the *Marseillaise* hardly grasps the revolutionary verve of the original. I would hold, therefore, that our students should early on in their schooling devote considerable time to the study of at least one foreign language. This effort would prepare in them splendidly an open attitude towards and an appreciation for the broader vistas that a global education attempts.

Global Perspectives

There are and there must be many different definitions of global education. A narrow one which is often used defines that we subsume under this label all teaching about subjects that are of truly global concern and that can only be dealt with by a world-wide effort. Such subjects might be nuclear war, providing food for the world, control of population growth, industrial pollution, energy problems, etc. The humanities do not directly relate to solutions of these problems. However, people throughout the world who wish to address these questions must first learn how to understand each other's histories and traditions, the different value systems and societal structures, the contrasting modes of thinking and of approaching problems. Misunderstandings, mistrust and preconceived notions must be eliminated, respect and understanding for other peoples of the world must be built, the sameness of humankind must be taught. It is in these areas that the humanities can make a contribution if they shift their approach to a more global perspective. As they deal through the teaching of language and thought with the foundations of humankind, the humanities might help lay the foundations for future success in our efforts towards global education.

CHAPTER 3

A Historical Perspective

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> Hamlet: Do you see yonder cloud that's almost in shape of a camel?
> Polonius: By the mass! and 'tis like a camel indeed.
> Hamlet: Methinks it is like a weasel.
> Polonius: It is backed like a weasel.
> Hamlet: Or like a whale?
> Polonius: Very like a whale!
>
> William Shakespeare, *Hamlet*

Camel, weasel, whale—history is and always has been all things to all people. History, Herbert Butterfield once observed, ". . . is at the services of good causes and bad. In other words, she is a harlot and a hireling. . . ."[1] It is perhaps for this reason, or partly for this reason, that there is evident today a discouragingly wide-spread arrogance (Is that the proper word?) about the irrelevancy of history, the uselessness of historical perspective. The future is what is viewed as important, not the past—tomorrow, not yesterday. It is, of course, natural to look forward with anticipation and expectation toward the unknown, toward the future. It is not a paradox to suggest that to better anticipate the future we must look to the past. But historical perspective does not enjoy high regard today as an analytical tool. We live in a distressingly ahistorical or unhistorical time when history, we frequently hear, cannot shed any useful light on our contemporary problems.

Perhaps like Hamlet and Polonius, historians have too often misled the public by offering first camels, then weasels and finally whales, depending on their respective vantage points. A cloud remains after all only a cloud no matter what shape it takes, and perhaps so it is with historical explanation (or so many would argue)—it remains merely a cloud, veiling the ultimate truth from us and contributing little to our understanding. This view, which seems so widely held today, is extremely unfortunate because history and historical understanding are essential if we are to make informed judgments about the present and act reasonably and responsibly in trying to shape a world in which we want to live. "The only way to predict the future," Eric

Hoffer wrote, "is to have power to shape the future."[2] One of the most essential tools for shaping the future is knowledge of history.

Today, the forces of technology are propelling the world forward at what often appears to be an apocalyptic rate of speed. This very fact keeps our eyes too often focused squarely on the future, to the neglect of the past. Yet a recognition of the value of history is essential if we are to manage the exceedingly rapid change occurring now for the betterment of humankind. The technological capabilities of the modern world, especially the awesome capability for destruction, require, indeed demand, a responsible understanding and appreciation of the fragile quality of human existence on this planet even in an era of advanced scientific and technical expertise. The sobering lessons of history must be recognized as important ingredients in the decision-making process if we are to survive into the future.

History, Karl Marx noted, is essentially the study of man, his wisdom and folly, his successes and failures, his advances and retreats. "*History* does nothing," he added, "it possesses no immense wealth, fights no battles. It is rather *man*, real living *man* who does everything, who possesses and who fights."[3] History reduced to its essence is a study of what makes man human, a study of those qualities of mind and spirit which he brings to bear on events and on the environment and which separate him from the more passive lower orders of life. To know the past is a deeply felt human need that manifests itself early in the life of the human species when the child first begins to question his/her own existence with the query, "Where did I come from?", thus beginning the lifelong search for the meaning of the mystery of being. Historical consciousness develops out of this early personal concern for origins. It is, therefore, a natural impulse, one which must today be revitalized and reoriented.

Jacob Burckhardt, one of the great nineteenth-century historians, recognized that history begins with "the break with nature caused by the awakening of consciousness,"[4] a consciousness of time as part of a continuum, not just of the cyclical changes in nature, the rotation of the seasons or even merely of the limits of the span of human life, but rather consciousness of the unfolding of events in time in which man is actively involved. History becomes then, in the words of E. H. Carr, "the long struggle of man, by the exercise of his reason, to understand his environment and to act upon it."[5] Although recorded human history occupies but a fleeting moment on the clock of cosmic time, a concern for history has been a part of man's epic struggle for survival in the world. Thucydides, considered to be the first scientific historian, writing more than 2,500 years ago his monumental *History of the Peloponnesian War*, hoped that his work would be ". . . judged useful by those who desire an exact knowledge of the past as *an aid to the interpretation of the future*."[6] He had composed his brilliant anatomy of war and revolution, the breakdown of internal and external order in ancient Athens, so men might avoid such tragedies in the future. Thucydides' concerns are no less valid today. The French are fond of saying, "The more things change, the more they remain the same." Although times have changed dramatically, Thucydides' hope for the value of his historical work remains unchanged. If we are to interpret the future today, we still must have "an exact knowledge of the past" of the same sort Thucydides sought to provide his contemporaries in ancient Athens. In fact, it can be argued that we have an even greater need for knowledge of the past than did the ancient Athenians because we live in a far more dangerous and potentially destructive world.

Several years ago, walking along the banks of the majestic Dnieper River outside of Kiev, in the Soviet Union, I met a group of modern-day Thucydideses who were discussing the terrifying events of the Nazi invasion of the Soviet Union in 1941-42. I stopped to listen, fascinated by the living history I was hearing as these Soviet citizens exchanged war stories. As an obvious foreigner, my presence did not escape notice, and I found myself drawn into the conversation about war. Having had no personal experience of the horrors of war, I felt rather inadequate in trying to contribute to the conversation. But my hosts were very kind and patient and understanding. They urged me to immerse myself in the study of war so I would better understand how terrible it is to be involved in the systematic killing of one's enemies. They assured me that the Soviet people knew firsthand the horrors of war and were not anxious to have them repeated. I acknowledged as how the American people were no more anxious for conflict and that cooperation and mutual respect were preferable. "But," my new friends replied, "you don't understand history. You must live history, you must be tempered by history, and then you will understand." I have never forgotten that strange encounter with wise Ukrainian peasants who did have a real sense of history and whose stories and memories of war were very much akin to Thucydides' history; and their purpose was his purpose—we should be guided by the lessons of history.

The technogical changes of the past two hundred years dwarf into insignificance the technical achievements of the preceding two thousand years, and the pace is accelerating. The world is shrinking before our eyes, and we speak now of the "global village" or "spaceship earth" as ways of acknowledging the fact that the world has been knit together physically by the incredible advance of technology. But a mere glance at the evening newspaper makes it abundantly clear that humankind has not followed the example of the machines we have created, for we have not been knit together into an international community of human beings. We have not been able to overcome the powerful force of nationalism, we remain strangers, or worse, enemies of one another. Separated not by distance nor by the unavailability of the means of communication, man is still plagued by ignorance, intolerance and indifference which constitute more impenetrable barriers than any physical or technological obstacles. The dangers of this situation, if it continues in an era of increasingly sophisticated technology, are incalculable and project the possible annihilation of the human race. The existing worldwide tension, anxiety, violence and uncertainty are not new phenomena in world history, but they exist within a set of entirely new circumstances which threaten dire results for the future of humankind. The tensions and violence must be reduced and then obliterated if humankind is to survive into the 21st century. There have, of course, always been purveyors of doom and gloom, talk of the ultimate disaster, and apocalyptic speculation, but there is special urgency attached to these sentiments today.

The forces of technology of which we are so proud in this fourth quarter of the 20th century have not only emancipated us (that is, the industrial nations of the world) to an unprecedented extent from the forces of nature but have also demonstrated our enormous vulnerability and our interdependence. Few would argue against the need for humankind to draw together in some greater unity, but even fewer have any idea how to proceed toward the achievement of the ideal of a world community. The ideal is perhaps unrealizable, but this should not deter us from striving toward it. One necessity is for us to become better acquainted with one another. A simple approach to achieving that goal is greater familiarity with each other's history. We cannot afford to deal merely with the immediate present, because, like it or not, we live in a mental time stream and are part of an ongoing process which includes the past, present and the future. Without the benefit of historical perspective our view of both the present and the future will be skewed.

Our current attitudes toward history are still shaped too much by nineteenth-century traditions which viewed national differences as fundamental and essential elements to be emphasized and preserved at all costs. The nation-state represented the framework in which culture developed, and it served as the wellspring of the national ideal. Nationality and nationalism have remained powerful forces in the twentieth century, propelling the world into two major and numerous minor conflagrations. Today, we are again surrounded by a renewed sense of ethnic consciousness which focuses on ethnic identification and ethnic differences which, although acceptable from a cultural point of view, often divert attention away from the global dimensions of problems and concerns. We have, therefore, been conditioned by a rather parochial perspective which can be corrected only by a deeper awareness, knowledge and understanding of other cultures and other peoples. Cross-national comparisons can do much to break down this parochialism and are valuable not only for the breadth they provide but also because they enhance our ability to appreciate and understand our own culture, values and institutions and contribute to a better understanding of the United States' evolving role in the world.

We must develop a sense of common purpose, a sense of where we are going, what we are trying to accomplish not just as individuals, nations, peoples, but as human beings. Drawing upon the experiences of others, we must develop a vision of the world we wish to create and to live in in the 21st century. That vital task cannot be successfully attempted in a vacuum, in isolation. It can be accomplished only if we are prepared to step outside of ourselves, to realize that other persons and other cultures hold contrasting (often contradictory) values which must be understood and respected (not necessarily accepted). It is necessary to develop an ability to interact with other persons and cultures, to understand the world not in an ethnocentric sense as a mere extension of ourselves, but as a complex, evolving, interdependent unity. The hidebound attitude that we need to know and understand only our own small corner of this planet has never been more patently false and dangerous than it is today.

Karl Marx noted in 1877 that events ". . . strikingly similar but occurring in a different historical milieu lead to completely different results. By studying each of these evolutions separately and then comparing them, it is easy to find the key to the understanding of this phenomenon. . . ."[7] The comparative method advocated by Marx, and by many others before and since, can be a useful tool for the student of history. New insights, new questions and new approaches to problems can result from comparative study. "Thinking without comparison is unthinkable," is an aphorism of profound insight. In order to ask the right questions and reach significant conclusions the informed citizen must look beyond his/her own experience to the experience of others. A willingness to employ this comparative approach is built upon the assumption that there is a certain universality in the human condition and that just as individuals learn from one another, we can learn something about our own and other societies by comparing human behavior in different contexts and in similar circumstances. We can learn much about ourselves and others by exploring these differences and similarities. "The study of differences between American, Russian, and Indian society as a whole," E. H. Carr has suggested, "may well turn out to be the best way of studying differences between individual Americans, Russians, and Indians."[8] Our own experience too often colors our attitude toward the rest of the world. The American experience is viewed in this way as the model to be emulated by others, and this arrogance reduces progress to a quantitative accumulation of technical skill, political equality and economic development. Those societies which do not strive for these goals are often consigned to the "trash bin of history," to paraphrase Leon Trotsky. How much do we, in the modern, technically sophisticated West have to learn from far less "progressive" peoples? For example, from the Tasadays, the gentle Stone Age tribe, insulated from modern technological society by the dense rain forest of the island of Mindanao in the Philippines. We can learn something about a simpler life and something about our own origins and evolution. Other societies, even those less well-developed, have something to offer us if only we will make the effort to learn from them. The study of history is the key to unlocking the world's accumulated wisdom, something we have much need for in our contemporary world. "Today," the historian Hajo Holborn has written, "history is the approach to the knowledge of man and through history we acquire the wealth of former civilizations. The critical awareness of the potentialities of man enables us to act in our own time with higher insight and vigor."

Few people in Europe or in the United States or elsewhere in the world in the summer of 1914 had ever heard of Sarajevo, and fewer still could have located it on a map. Yet events occurred in that small Bosnian capital which ignited a world conflagration whose shadow still extends across the twentieth century. Will there be another Sarajevo in this century? We fervently hope not, but it could be located somewhere in Poland, or in El Salvador, or in the Straits of Hormuz. Can we afford to remain ignorant of the issues and the problems which could erupt into the greatest and perhaps last military struggle of all time? Again, I think not. It is, therefore, imperative we recognize that what happens elsewhere, even in remote and unknown places, can have profound effects on our lives. I am fond of telling students that what occurred in Russia in 1917 represents probably the single most important political event so far to have occurred in the twentieth century, because the Russian Revolution of 1917 was an event that today affects each and every one of us in very profound ways. The response to this assertion is usually consternation and disbelief. How could anything that occurred so long ago and so far away affect the lives of Americans living in the 1980's? Yet on reflection, it is clear that the advent of a communist regime in Russia in 1917 has helped to shape world affairs in the twentieth century more significantly than virtually any other event. To understand the current aspirations of the Polish people or the conflicting forces in El

Salvador or in a number of other troublesome areas in the world, an understanding of the Bolshevik Revolution and what it represented is valuable and perhaps even essential. Everywhere we turn, the lessons of history shed light on our contemporary world.

The assumption of the historian, even amidst predictions of world catastrophe, is that history will continue and that the process of change will accelerate and the impact of that change will continue to expand. The concern of the historian will of necessity broaden to encompass the expanding process of change and bring it into some meaningful and coherent structure, to make it more accessible and understandable to more people. There is a danger, however, in viewing this historical process as merely an expansion of Western values and institutions and particularly of American values and institutions. We have already seen some signs of the rejection of American claims to leadership of the Western world. The dominant role of the United States as one of the world's two military superpowers is unlikely to change significantly in the foreseeable future, but America's moral leadership of the Western world has suffered numerous setbacks in the recent past—in Southeast Asia, in Latin America, in Africa, in India ad even in Europe. These setbacks have stemmed in part from our insensitivity to others, to their history, their dignity as human beings, and above all to their culture and values. That we believe others must master English to enjoy the benefits of superior American civilization is the height of arrogance at a time when nations, especially in the Third World, struggle to improve the well-being of their citizens and maintain at the same time their own values and culture.

How often has the world been brought to the brink of catastrophe by misunderstanding, ignorance and lack of communication over the past 20-30 years? At a time when the United States and the Soviet Union were entering the Cold War following World War II, we had a mere handful of experts in Russian-Soviet affairs. Mutual misunderstanding was the product of mutual ignorance. How little do we understand today of the nature of Islam and the Islamic revolution in Iran? How much did we know of Southeast Asia in the 1960's? How well prepared are we to analyze developments in Poland or China or Japan? What can we say of the conflicting forces in El Salvador? If ever there were a time when reasoned understanding and historical perspective are needed, it is today in our world which seems to be hovering precariously between continued advance and development and a retreat to the Stone Age. To eke out an existence as a Chinese peasant, an African mine worker, a Turkish mountaineer, or an Indian villager is to live in a world that is almost incomprehensible to most Americans. Yet lest we take comfort in a false sense of security we hardly need be reminded of the jungle-like quality of many of our major cities, the poverty and ignorance which plague far, far too many of the citizens of the world's richest country, the crime, unemployment, racial prejudice and corruption which are rampant everywhere. We need to recognize, however, that our problems are not necessarily unique, nor do they take precedence over others' problems. There are common problems in the world, problems which we must strive to resolve and which we can perhaps help others avoid in the future. We in the United States have achieved a level of material comfort unprecedented in the world's history, but we cannot sit back smugly and ignore other parts of this tiny globe, areas whose history, values and cultures may not parallel precisely our own. No one in the last decades of the 20th century can escape the interdependence of the world, and we must strive to develop knowledge of one another that leads to mutual respect and human dignity, understanding of the common problems which face us all in the form of population, food supply, energy, environment and health; skills which will allow us to make better and more informed decisions as individuals and citizens, not of this country or that, but of the world in order to take advantage of the challenges and opportunities of this shrinking planet. As the Chinese would say, we are cursed to live in interesting times, times fraught with dangers but filled with opportunities as well. Without a truly global perspective we cannot hope to meet the challenges and opportunities of the 21st century[9].

NOTES

1. Butterfield, Herbert, *The Whig Interpretation of History*. New York: W. W. Norton & Company, Inc., 1965, p. 131.

2. Hoffer, Eric, *The Passionate State of Mind*. New York: Harper & Row Publishers, Inc., 1954, p. 50.

3. Marx, Karl and Engels, Freidrich, *Gesamatausgabe*. Vol. 1, Part 3, p. 625, cited in Carr, Edward Hallett, *What Is History?* London: Penguin Books, 1964, p. 49.

4. Burckhardt, Jacob, *Force and Freedom: Reflections on History*. New York: Pantheon Books, 1943, p. 112.

5. Carr, *What Is History?*, p. 134.

6. Cited in Conkin, Paul K. and Stromberg, Roland N., *The Heritage and Challenge of History*. New York: Dodd, Mead & Company, 1971, p. 13.

7. Marx, Karl and Engels, Friedrich, *Sochineniia*. Moscow: Marx-Engels Institute, 1933, Vol. 15, p. 378.

8. Carr, *What Is History?*, p. 33.

9. Holborn, Hajo, *History and the Humanities*. New York: Doubleday & Company, Inc., 1972, p. 80.

CHAPTER 4

A Geographic Perspective

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> For the United States, born in a revolution of separation from Great Britain, the dominant political myth remains that of independence. But, increasingly, Americans are being forced to recognize that their economic well-being is greatly affected by a pervasive interdependence with other nations, whether highly industrialized or developing, Communist or capitalist, oil-rich or oil-poor.
>
> Leonard Silk[1]

Introduction

The above quotation is only one of many that could be used, and are being used in this volume, to emphasize the need for global education. Despite the anguished cries of some auto producers or apparel manufacturers for protection from foreign imports, most people recognize the futility of economic, political or cultural isolation. Iran and Iraq, engaged in border wars which few Americans understand and fewer still could locate on an outline map of the world, disrupt the flow of oil and raise the gasoline prices at our pumps. A blast of cold air in a region of Brazil unknown to most Americans raises the price of coffee enjoyed, indeed considered almost a necessity, by many. A Soviet invasion of Afghanistan not only results in a decision that prevents our athletes from competing in the Olympics, but also disrupts the flow of wheat from our midwestern farms, affects wheat exports from Argentina and realigns much of the South American trade in that commodity. These incidents exemplify the interdependence referred to in the opening quotation and illustrate the necessity for an increased understanding of global interaction.

The discipline of geography plays a major role in enhancing our knowledge of global issues. This chapter will attempt to substantiate this by reviewing the nature of the field and by illustrating geography's potential contribution to the study of global problems. A final section will explore the frequently overlooked position of geography in global education and suggest how this might be remedied.

The Discipline of Geography

It is not the purpose here to become involved in a lengthy, philosophical definition of geography; many other sources exist for that purpose. It is necessary, however, to summarize the central concern of this particular approach to knowledge. A colleague has stated most simply that the study of geography forces the student to think critically about why things are where they are. Thus, the discipline is concerned with a place perspective in much the same way as history is concerned with a time perspective.

Asking the what, where and why questions of phenomena on the earth's surface is essentially practicing the study of geography. The curious traveler who wonders why a factory appears on the landscape at a particular point, or why a city is located where it is, or why Kansas seems like an endless traverse through wheat fields is at least asking the right questions from a geographic perspective. For the uninitiated, the right answers might be elusive.

The study of geography may seem to lead to an endless cataloging of facts, a criticism to which the discipline has often been subjected. All too many of us recall having to bound our state, learn its leading products, or—worse still—memorize the counties—in alphabetical order, yet! Currently, however, the stress is on the explanation of location to discern patterns, to develop generalizations and to appreciate the interrelated nature of phenomena on the earth's surface.

Site and Situation

There is no more basic concept in geography than that of place in a site and situation context. These are the most critical elements of location and the start of understanding "why things are where they are." In the extreme, a site may be defined by its latitude and longitude. Or it may be indicated by some physical feature such as the site of Pittsburgh at the junction of the Allegheny and Monogahela Rivers. But it is when the situational element is added that life can be brought to the study of place. To recognize that the Monogahela River valley drains the bituminous coal fields that feed the steel mills of the city and that the Ohio River valley gives access to markets is to begin to understand the city's interdependence with the surrounding area, the country, and indeed, with the world itself.

A second example can be found in the geographic analysis of the world's largest port, Rotterdam. Its site near the mouth of the Rhine River would have little significance without an appreciation of its superb situation. The Rhine and its tributaries provide easy access to a highly prodictive hinterland which uses the port as its major outlet. But the area also has demands which tie Rotterdam to the rest of the world. Middle East oil, Appalachian coal, African minerals and Asian tropical crops all find their way to this port city creating an interdependence which links it to the rest of the world.

Traditional Approaches to Geography

In a brief, but important article, William Pattison identified the four traditions of geography.[2] These are labeled as the earth science, man-land, regional and spatial approaches to the study of the discipline. All are valid and in use, though the last is more current than the first. More importantly, for the purposes of this essay, each approach can contribute to the theme of interdependence or global education.

The earth science view reflects the geographer's concern with the physical environment. Many departments of geography in this country had their origins in departments of geology, and strong elements of physical geography remain as basic components of many departments today. Thus, most geographers in the early years of this decade were geomorphologists ". . . concerned with the classification, measurement, and description of landforms, and with the history of the processes that have produced them."[3] Currently, physical geographers espousing the earth science view also study the elements of weather and climate, natural vegetation, or soils.

With the increasing emphasis of geography as a social science, the purely earth science view has been overshadowed by the man-land approach to the discipline. The initial stress on how the natural environment affected man's activities led to the justifiable criticism of environmental determinism. This was moderated by the recognition that man and nature are mutually interdependent. In 1923, Harlan Barrows identified geography as "human ecology" and stressed just such relationships.[4] These human ecology concerns are still with us in the form of research on the potential disaster of occupance of flood plains, or of the effect of pesticides and defoliants on the environment, or in the outcries for clean air and clean water. Increasingly, what man is doing to the environment is far more critical than how the environment has constrained man.

The regional approach to geography attemps to integrate all of the major elements which give distinctive character to a given area of the earth's surface. The word "landscape" assumes importance as one identifies the interdependent elements that permit one to use labels such as New England, the Corn Belt, the Ruhr or the Tropical Rainforest. The student is forced to make generalizations, the validity of which vary with the scale of the study. Hence the Pittsburgh Steel Region at one scale gets swallowed up into the North American Manufacturing Belt at another, yet meaningful interpretations and explanations can be made at both scales. Criticized as being too descriptive with too much emphasis on the unique, the regional approach can nonetheless provide a useful view of the world and its interdependence.

Finally, the most current approach of the discipline is the spatial view. "The contemporary stress is on geography as the study of spatial organization expressed as patterns and processes."[5] Geographers increasingly view interdependence by studying the pattern and process of industrialization, the diffusion of innovation, the systems of urban hierarchies, the heat and water budgets of the atmosphere, or the intensity of transport linkages. Such emphases increasingly yield useful generalizations about the complex world in which we live.

While these four approaches have been presented in the historical sequence in which geography is perceived, it should be stressed that all provide valid ways of studying the world and obtaining some understanding of the interdependence of its physical and/or cultural elements. All are currently in use and are contributing to our knowledge of the world around us.

Geography's Contribution to Global Education

The author of the first chapter identifies ten problems or events which have global ramifications and require the attention of humankind on a worldwide scale. At least seven of these are of direct concern to the geographer (3, 5, and 9 are more peripheral) and can provide illustrations of geography's role in global understanding. Space, however, permits the selection of only three to examine in some detail: (1) the explosion of world population, (2) the rapid depletion of the earth's resources and (3) the "smaller world" idea.

Explosion of World Population

Geography shares with many disciplines the concern for people, but, as always, this discipline's emphasis must be on place. Thus, the questions asked are: Where are people living? Why are they there? Why are some areas empty, or nearly so? Where are the regions of high rates of growth? Where are the areas of major migration?

Even a cursory glance at a world map of population will show that most of the world's population is centered in four areas—East Asia, South Asia, Western Europe and Northeastern United States and adjacent Canada. But it is insufficient merely to identify the locations. The geographer must then consider a host of interrelated elements which help to explain that distribution. This may involve a study of climate, soils, mineral distribution, agriculture, urban development and several other elements of the physical and cultural landscape.

But the geographer cannot be satisfied with an analysis of the static picture of population distribution, for it is often the question of population dynamics which is critical, especially the relationship of areas of rapid population growth to food supply. Norman Borlaug, winner of the Nobel Peace Prize for work in developing the Green Revolution, has stated that since ". . . world population is expected to double by early in the 21st century, that means that within the next half century, 'world food production must be increased by at least as much as was achieved during the 12,000-year period from the beginning of agriculture up to 1975—just to maintain per capita food production at the inadequate 1975 level . . .' If disaster is to be averted, much of the additional production in the next several decades must come from increased yields on land under cultivation in Third World nations, where yields are still low."[6] This cannot be accomplished by Third World countries in isolation, but will require the cooperation through trade of the entire global community.

On a different scale the geographer examines the effect of population dynamics within political units. While such studies may appear to be isolated cases with no global implications, we cannot fail to recognize that what happens to demographic change in Haiti, Uganda or the population giant of the People's Republic of China creates ripple effects through the world economy. Clearly, one of the hopeful signs in world demography is the latter country's marked and rapid decrease in birth rate. That rate in the PRC has dropped from 30 per 1,000 in 1972 to 18 per 1,000 in 1980, one of the most dramatic declines found anywhere in the world today. Not only is this change required for the PRC to make its internal economic progress possible, but it also affects the role which that country will assume in the world economy.

At the other extreme are the questions of the world's empty areas and their potential for relieving the pressures of an exploding population. At the present stage of technology, which regions offer the greatest potential—deserts, the tropical rainforests, the savanna lands? What does the attempted expansion of irrigated areas do to the ecological balance of deserts? What results from trying to clear the rainforest? By examining these kinds of questions, the geographer, with his interest in the patterns and processes of spatial organization, makes a major contribution to our understanding of the global problems of population distribution and dynamics.

Depletion of Resources

Mapping of the world's resource base and analyzing the effects of that distribution have long been objectives of geography. One cannot understand the Ruhr without the knowledge of the coal beneath it. The glistening yellow mounds of gold tailings are the hallmark of Johannesburg. The fine strands of pipelines link the oil of the Middle East to the rest of the world. The chernozem soils of the Ukraine aid in making it the grannary of the Soviet Union.

While all these may appear to be local examples of resource analysis, each clearly plays a role in global education and an interdependent world. Not only has the Ruhr's steel found its way into world markets, but the depletion of the Ruhr's coal has made it possible to place Appalachian coal on docks of the region cheaper than it can be brought to the surface. South Africa's gold affects the money markets of the free world. Any failure of the harvest in the Ukraine sets off a chain reaction in other wheat-producing areas in the world.

Nothing illustrates spatial interaction and interdependence better than the petroleum situation. Any decision made by OPEC countries affects supply and price and ripples through the economies of the industrialized world. Gasoline prices increase and bring about an increased demand for smaller cars. This affects the world trade flows of automobiles and changes the structure of the auto industry in the United States. Increased petroleum prices upset balance of trade figures, causing tanker shipping capacity to be unused and shipyards to lay off workers as tanker demand is reduced. Indeed, such action by petroleum producers is changing our functional definition of oil shale as a resource from a potential to a practical oil supplement. Perhaps even more critical is the effect on the Developing Countries that find it difficult to pay for petroleum-based fertilizers needed to increase food supply.

Clearly, geography's concern with the patterns and processes of resource availability is central to the discipline. It is a fact that most of the university courses entitled "Conservation of Natural Resources" are offered in Departments of Geography and much of the research on this vital topic originates with geographers.

The "Smaller World" Idea

Muessig notes in Chapter 1 that ". . . radical changes in transportation and communication have brought the peoples of the world closer together, increased their interdependence, emphasized specialization with gains in comparative advantage and losses in autonomy . . ." The concepts expressed in his statement embody the very essence of geography as the science of spatial interaction.

Flow maps of world trade clearly indicate global interdependency. Indeed, if students at the conclusion of a world regional geography course are able to make some interpretation of the nature, direction and volume of commodity flows, they can be said to have learned their lessons well.

Several examples of trade analysis have been alluded to in this chapter, but a case study of current interest can be cited to illustrate the need to understand this aspect of global interaction. One of the major commodities on the Pacific trade route is Japanese automobiles entering the United States. The magnitude of this trade has had severe repercussions on the American auto industry and has led to a call for protection. If heeded, such a move will surely affect other elements in the U.S.-Japanese trade flow. An understanding of such interrelationships is an absolute necessity for those considering a protective policy.

Finally, one can see how all three of these examples of the geographer's craft are interrelated. The world population pressure places great stress on the resource base. The differential resource base fosters the exchange of goods. The exchange of goods increases global interdependence.

Geography—the Forgotten Discipline

If knowledge of the spatial organization of the earth's physical and human resources is basic, it can be questioned why geography is so often ignored. Rarely does it appear as a separate subject beyond the middle school. When it does, the course frequently lacks the academic standing of other disciplines. Attempts to integrate geography into history courses usually result in its receiving little or no attention. Indeed, most regional history texts may devote a first chapter to geography, but this usually consists of nothing more than a description of the landforms of the area and is promptly forgotten in the remainder of the course. Even a recent report from the Council on Learning entitled *Educating for the World View* makes no mention of the discipline, nor does their Task Force on Education and the World View contain a single geographer.[7]

The reasons for this omission are many. The number of disciplines competing for the limited time slots of secondary schools' class schedules often precludes the offering of geography. The inadequate exposure of teachers to geography means that few feel comfortable in offering such a course. But much of the blame must be shouldered by the discipline itself. It still suffers from the early emphasis on environmental determinism or from the purely descriptive nature of much of the early work. It has been difficult to wean the public away from a perception of the field as one memorizing capitals (reinforced perhaps by the television game show "geography" category) to one analyzing spatial interaction. The reasons need not be belabored. More important is the recognition of the weakness of geography in the schools and of the necessity of injecting the geographic perspective into global education.

There are several solutions to this problem. Ideally, one would like to see better teacher preparation in geography through stronger state certification requirements or increased university emphasis on subject matter fields. Recognizing that the discipline cannot attract its own time slot in the teaching schedule, geographers might press for the infusion of geographic concepts into history. For example, the history of the westward movement in the United States needs to be placed in proper spatial context. Appreciation of the Industrial Revolution can be enhanced by some understanding of the location factors of manufacturing and how these operated to bring about major industrial regions. And the history of modern Japan can only be understood in the context of its world-wide trade relations. Such fusion of disciplines is not easy to accomplish, but the skilled and well-trained teacher can greatly extend a student's social studies knowledge by this technique.

Conclusion

In the opening paragraph of "What Students Know about their World" in the Council on Learning's report, the authors identify the question which a knowledge of geography can aid in answering. "Students graduating from American colleges in 1980 live in a world whose people and institutions are increasingly interdependent. Are these educated citizens prepared to understand the interactions of nations in an interdependent world?" Note the emphasis on "interactions" and "interdependence." The patterns and processes of spatial interaction provide the core of geography, the knowledge of which contributes substantially to global education.

Gilbert White has summarized the major objective of teaching geographic understandings. He believes that a liberally educated person should be able to identify the patterns and processes of selected landscape features on any given part of the earth's surface and suggest the changes expected from a shift in conditions affecting the processes.[8] A sound knowledge of geography will do this. With such knowledge liberally educated citizens can comprehend the world's diversity and interdependence, can understand the links between global issues and their daily lives, and can make the intelligent decisions which are required in a shrinking world.

NOTES

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CHAPTER 5

A Political Perspective

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Perhaps no academic discipline has a greater claim to making a significant contribution to global education than does political science. Before we can present the evidence in support of such a contention, however, we should have a clear understanding of what we mean when we use the words "politics" and "political science."

What Is Politics?

There are many definitions of politics and political science, but there is substantial agreement among practitioners—of both the academic discipline and of the way of life we call politics—to allow us to describe the contours of each.

Politics is, first and foremost, a *process*. This process or set of activities is undertaken by *actors* interacting with one another in pursuit of *goals* and *values*. This interaction takes place in the context of each actor or all sets of actors suggesting *policies* (and specific *programs* of implementation for these policies) which, if successful, will result in the achievement of desired goals or values.

Conflict, *competition*, and *cooperation* are styles of behavior adopted by these political actors as they attempt to make their influence felt, and these styles manifest themselves in strategies of *threats*, *promises*, *rewards*, and *punishments*. These strategies—once determined by an individual or members of a group interacting with each other—are then *communicated* with the targets of the selected strategy via (a) normal correspondence, (b) the verbal relaying of information through a designated representative in normal channels, (c) the use of the public media, (d) the use of the official bodies of government where public discussion and debate are allowed, or (e) negotiations at the bargaining table.

Thus, politics is concerned with *decision-making*—with respect to the set of values which one deems paramount in guiding one's thinking, with respect to the kinds of goals which one wishes to accomplish, with respect to the selection of policies to achieve these goals and to specific programs to carry out these policies, and with respect to the strategies one selects to maximize the likelihood that these policy choices are advocated by the appropriate sets of individuals in order to ensure their adoption.

As you can observe, these steps constitute a process, and thus we can return to our initial statement in this chapter that politics is a process. But as you ponder these various steps of the process, it should become obvious to you that we really have not limited the subject matter very much. And indeed we have not. A "datee's" dilemma over whether to accept an invitation from a "dater" to attend a dance; a student's dilemma over a choice of an academic major, or specific course to take, or even the amount of time to be allocated for studying for an examination during the same evening as an important athletic event on campus; or a graduate's dilemma over which job to take—all of these constitute decision-making environments which are addressed through the process of politics.

Obviously, we need to focus our attention much more toward what we in our "gut feeling" believe to be politics. Here we are concerned with those goals, values, policies, programs, and strategies which relate to the way humankind has organized itself in informal (social) and institutional arrangements for facilitating the group's members' desires for—as the preamble to the set of rules for one such orderly society suggests—provision for the common defense (protection of self), promotion of the general welfare, establishment of justice, and the ensurement of the blessings of liberty. Thus, we focus on those political actors who are requesting or demanding such services on the one hand and on those actors who are attempting to provide (or prevent) such services on the other hand. Types of political actors which come immediately to mind include governments, political parties, interest groups, voters, and other private groups bent on non-conventional (usually violent) change. And the relevant types of behavior, as distinct from the three styles mentioned earlier, include voting, pursuing office, passing legislation, seeking to influence the passage of laws (lobbying), establishing the legitimacy of such legislation, campaigning for issues, debating, negotiating, engaging in verbal conflict, and fighting wars.

These types of actors and behavior are present in all political activity whether it be a local issue in your community or a global issue affecting all members of the race.

What Is Political Science?

The second question raised in the opening paragraph of this chapter—What is political science?—is much easier to answer. It is simply the formal study of the *processes affecting the social and institutional arrangements* (and the rules of behavior for such collectives) created by humankind in pursuit of those desires that cannot be met by individuals acting alone without such arrangements or rules. But because we attach a second word—science—to our discipline, certain assumptions guide us as we seek to study our subject matter. We are concerned with theories of behavior, with why some event occurred or what caused it, with how decisions are made, with the characteristics of these decisions, with the action taken to implement the decisions, and with the consequences of these decisions (the specific intended consequences for the specific targets of the decision as well as those more general and perhaps unintended consequences for society as a whole).

Furthermore, we attempt to use a clearly defined set of procedures—*the scientific method*—to answer these questions. We first select a problem, phrase it in terms of a researchable task, speculate about how the above questions might be answered, collect our evidence, examine the evidence, draw conclusions from the evidence, and interpret these results. In short, we use the tenets of science to address the relevant aspects of a political problem: (1) the antecedents of a decision; (2) the process of decision-making itself; (3) the actual decision to perform an action and the action itself; and (4) the consequences of such action.

A Global Political Perspective

In the above sections we have addressed both the nature of politics and of political science. We turn our attention now to how our understanding of politics contributes to a global perspective. More specifically, we want to demonstrate that a fundamental understanding about the nature of political processes in general and a comprehensive knowledge of how these principles work in the contemporary global environment are essential to fulfilling our global education mission. We live in an increasingly interactive and interdependent world where knowledge of the rest of the globe, and particularly of those people of the world whose heritage differs from our own, is basic to such humanistic goals as eliminating parochialism, such humanitarian desires as eradicating global hunger, disease, and inequities, such pragmatic aims as encouraging international trade, and such critical necessities as avoiding war. But before our students can begin to address these issues, they must first develop: (1) the ability to conceptualize and understand the complexities of the global system; (2) a knowledge of world cultures and international events; and (3) an understanding of the diversity and commonalities of human values and interests.[1]

Clearly at the heart of this set of characteristics is politics. Global complexities are complexities because of the failure of individual actors to solve problems which, left unresolved, have created a world of uncertainties. Uncertainties and disputes over preferred outcomes ("the consequences of policies" step mentioned earlier) and/or over programs to achieve such outcomes abound everywhere.

Let us examine the situation more closely in order to understand how politics provides a foundation for developing a global perspective. In Chapter 1, the author revealed a list of problems, dilemmas, and developments which have global ramifications. What distinguishes this list—explosion of world population, depletion of earth's resources, threat of nuclear destruction, environmental pollution, human rights, and so forth—from previous lists of problems is a number of characteristics which have *political* significance. These relate to the nature of a global issue. By definition they *transcend the traditional boundaries of the nation-state* as the impact is felt far beyond. Thus, these issues are characterized by an *incapacity for autonomous decisions*. No single actor is capable of resolving these issues. A second fundamental quality of today's issues is the existence of a *present imperative* which not only impels various actors to press for resolution but which encompasses the varied and often competing views as to how that resolution ought to proceed. A third characteristic of these issues is that their *resolution requires policy action*. And finally, these issues are characterized by their *persistence*.

The following scheme compares the two different frameworks discussed so far in this chapter and suggests how these fit together in an analytical perspective (right-hand column). The right-hand column represents an analytical approach which shows how knowledge of political processes allows students to understand the complexities of these global problems. In short, this approach suggests four distinct analytical perspectives: (1) who are the *global actors* involved in the issue, and what are the linkages among them? (2) what prevailing values are operating, and how have the relevant actors responded to these values? (3) what policies are applied by these actors at the global level, and how are these policies determined? and (4) what futures are represented in the values and policies of these global actors? In a sense, these four categories represent steps or stages in the process of addressing an issue. Thus, actors become involved in an issue because of some interest. This interest is generated because of a set of underlying values which characterizes the actor, and the actor, in turn, decides how this general value orientation will be translated into specific values for the specific issue under consideration. This leads the actor to seek to make policy, that is, to decide the range of options and the risks and opportunities associated with each, to select a policy, to determine how the policy can be transformed into a program of action, and to implement the program. Finally, the actor examines the consequences of the action, that is, the future.

Let us examine the four specific political perspectives outlined above. The first is the kinds of actors who become involved in the international arena, that is, who deal with global issues. We can distinguish them according to *legal structure* and *level of organization and/or participation*. Legal structure refers to whether the participant is a *governmental* or *non-governmental* participant. The former group has been created by governments, and the individuals participating serve as representatives of these governments. The second structural type is composed of private organizations or individuals. By level of organization and/or participation we mean that point in the global hierarchy where the actor tends to operate. We can distinguish three such levels: subnational, national, and international (sometimes we also refer to this last category as transnational or supranational). The following scheme classifies typical actors in the global arena according to these two criteria.

Level of Organization	**Structure**	
	(A) Governmental	**(B) Non-Governmental**
(1) Subnational	governments of subunits, such as the state of Ohio	individuals; very informal groups; local organizations
(2) National	central governments of nations	national voluntary associations
(3) International	international governmental organizations	international non-governmental organizations; multinational corporations

What Is Politics?	**Characteristics of Global Environment**	**Specific Political Perspectives**
(1) Actors	Incapacity for Autonomous Decision	Actors
(2) Values and Goals	Present Imperative	Values
(3) Process of Decision-Making	Required Policy Action	
Policies Programs		Policy
(4) Consequences	Their Persistence	Futures

All of these kinds of actors are found in the global arena. Governor James Rhodes of Ohio, for example, can be found traveling around the globe seeking to bring foreign business to Ohio. The number of national or central government agencies involved in global actors numbers in the hundreds. And international governmental organizations (IGO's)—composed of representatives of at least three governments and created via some formal arrangement—emerged as a powerful force after World War II and now number over 300. Some of these are universal, that is, open to all national governments of the globe, while others have a regional focus. Examples of the former include the United Nations or World Health Organization. The latter category includes such types as the Organization of American States, open only to Western Hemisphere nations.

Non-governmental actors include individuals who make their mark on the global arena by, for example, designing some invention which has global consequences or serving as a (private) goodwill ambassador to help ease tensions among warring peoples. Terrorist groups also are important subnational actors. At the national level, we find such groups as the American Legion, American Red Cross, and the Canadian Olympic Committee among the thousands of groups that participate in global activities. At the international level there are over 3,000 formal non-governmental organizations (INGO's) operating in order to deal with issues of importance to them. Examples include such varied groups as the International Olympic Committee and the International Airline Pilots Association. Most of these INGO's are non-profit in nature, although all exist to further the goals, including economic ones, of the people whom they represent. A second example of a group operating at the international level consists of multinational corporations (MNC's), profit-making companies that, although headquartered in one country, have subsidiaries throughout the globe. There are over 10,000 such corporations operating today, and these generate a tremendous impact on global events. Thus, when we think about the types of actors who are either engaged in making global decisions or who are trying to influence decision-makers, it is useful to apply this three-by-two classification scheme in order to appreciate better the complexity of trying to resolve global issues in a world where power is distributed very differently from the vertical structure (from the top downward) typically found at the national level in solely domestic issues.

Let us turn our attention now to the types of values typically found as these global issues are addressed by the variety of actors just described above. Nine such values can be isolated:

(1) international peace
(2) national self-determination
(3) national development
(4) international economic equity
(5) national autonomy and self-reliance
(6) ecological balance
(7) the state
(8) basic human needs
(9) participation[2]

We shall briefly describe each of these. *International peace* refers not only to actual violent conflict but also to other kinds of conflict behavior between actors. A variety of mechanisms have been created to counteract the likelihood that the problems emerging in the global area will erupt into physical conflict. Among these include disarmament attempts, alternative means of ensuring security, such as alternative collective security arrangements, and many attempts to control the use of weapons.

National self-determination, the ability of people to select their own social, economic, and political systems, was the greatest post-World War II drive among many developing areas of the world. This value still exists today, although, since political self-determination has occurred in most corners, other aspects such as economy self-sufficiency loom important.

National development emerged among the less developed or poorer countries (LDC's) as the gap between the "haves" and the "have nots" grows larger as traditional development strategies prove ineffective. Thus, the drive for "a new international economic order" (NIEO) has emerged among the LDC's as they strive to limit their dependency upon the developed or rich sector.

International economic equity is the fourth global value suggested above. This is the preferred goal of the LDC's as their new development strategies begin to work, and the NIEO highlights a variety of economic relationships designed to bring about a more equitable situation. For example, such specifics include stable commodity prices tied to prices paid for products bought from industrialized countries or permanent sovereignty of the LDC's over their natural resources.

National autonomy and self-reliance refer to the poor countries' disengaging themselves from the developed sector in a manner sufficient to permit autonomous goal setting and their own strategies of development.

The sixth global value suggested above is *ecological balance* as the forces of development come in conflict with environmental issues. This has consequences for both the developed and developing sectors. For the former, "over development" has entered their vocabulary, while for the latter, development strategies adopted in earlier times by the current developed sector may need to be revised.

The state represents an implicit value as it has been upheld by some as the justification for pursuing many of the global values mentioned earlier, but is also used to justify the denial of other values deemed important by individuals who reside within the confines of a country.

At the individual level, the value of *basic human needs* gives to individuals what other values provide for the large units, such as nation-states.

Food, housing, clothing, water, health services, education, and access to transportation constitute the basic needs demanded by individuals throughout the globe.

And finally, individuals and groups throughout the system, including the local sector, are seeking additional avenues for increased *participation*.

The process of decision-making and the policies agreed upon constitute the third part of our global perspectives framework. The same steps in reaching decisons are discussed earlier for all political decison-making are also relevent in the global arena. But the unique nature of the global arena suggests a number of factors which tend to exacerbate the situation: the large number of different kinds of global actors with an interest in key issues; the absence of policy makers at the global level who can function in a context of sovereignty; the diversity of problems and differing perceptions in their interpretation; and the complex linkages across issues. As a consequence, there is an emphasis on political rather than technical solutions to problems. Policy programs, if identifiable, tend to be diffuse, while interdependence of actors and issues prevents focusing on any single problem without considering its effect on other issues.[3]

Finally, an analysis of the future forces us to examine the historical dynamics that created the global issue, to outline the various scenarios that are possible given the policies adopted, and to ascertain whether, in fact, these policies are leading to the desired outcome. And, if necessary, we must return to the decision-making stage if the policies must be changed in light of the initial consequences.

Population as a Case Study

Applying this framework of actors, values, policies, and futures to the set of global issues such as those outlined in Chapter 1 will demonstrate the utility of political science for generating a global perspective. For if a requirement for successful global education is the preparation of responsible citizens for participation in this global system, then students must be able to analyze global problems in a systematic fashion.

In order to give you an appreciation for this link between the tenets of politics and the infusion of global perspectives, let us examine the first issue outlined in Chapter 1, that of population. We have been told that population as an issue affects the judgment and actions of large segments of the world's inhabitants either directly or indirectly. But to understand this fully we have to comprehend the characteristics of population which define its impact beyond the limits of a nation, and consequently, make it analogous to any political decision-making issue.

Recall that global issues are characterized by an incapacity for autonomous decison. The population issue is no exception. No single actor or one class (nations, for example) of actors is capable of resolving the issues associated with population—its growth, the pace of that growth or the placement of limits on either its pace or level. It takes but a moment's reflection to recognize that the dimensions of the earth's population are the result of action by individuals and couples throughout the world. And those individuals and couples become the object of the actions, seldom concerted and often competitive, of a wide variety of governmental and nongovernmental actors at all levels. While a large number of nations may agree that population issues should be addressed at the national level, other actors, such as the Catholic Church or the International Planned Parenthood Federation, may not support such a position. And the various sets of actors may hold widely differing views of what action should be taken. Some may prefer a growing population in order to provide employment or military manpower; others may wish to limit population size in order to protect apparently scarce resources. The developing nations may see an obligation of the developed countries to aid in relieving the effects of population growth; the developed world, in turn, may demand population control as a prerequisite to aid. This incapacity for autonomous resolution characterizes population as a global issue. This emphasis on *actors*, the linkages among them, and their competing goals suggests one way in which politics influences a global perspective.

The second part of the framework focuses on *values*, and the population issue suggests a present imperative. Consider, for example, that there has been for some time now an expression of great concern in the developed nations, particularly the United States, concerning the threat to international peace due to rapid population growth (expressed dramatically as "the population bomb"). This view has lent a growing sense of urgency to adoption of an active position advocating population control outside of the developed world. That position, however, challenges a number of countervailing values in the very target areas where the rate of population growth has been high. As noted above, national survival for some means sustained population growth. The efforts to limit such growth from already developed countries is thus seen with suspicion as a device to keep poorer nations in a state of overall dependency. Yet, again, some developing nations have perceived national survival in precisely the opposite terms and now lead the way toward population control. While an imperative is present due to population trends regardless of competing views, the outcome of those trends will depend on which values, or combination of values, will prevail. Hence, a *values perspective*, a second analytical focus in this chapter, also shows the link between political science and global perspectives.

The third aspect of our framework goes to the heart of politics—the actual process of decison-making—which occupied much of the early part of the chapter. It is evident that action—the process which combines actors with values—implies policy. The targets of such policies remain those many couples who must make individual daily choices which affect world population growth. But other actors may make choices which are more clearly policy relevent. Nation-states, for instance, may set and enforce both emigration policy and immigration policy which govern the movement of people and therefore population distribution. By the same token, because of the nature of the target actors, the outcome for other policy choices may be less effective, and less sanguine. Policies to reduce fertility may, for example, have limited impact, because there are other, competing policies active in the same arena and severe constraints upon enforcement. Couples tend to make their population decisions in private and without reference to policy pronouncements. And, as was suggested earlier, global issues tend to be related. Thus, population policies may prove to be closely linked with those relating to food, to energy, to the environment or to other perhaps more specific areas. Indeed, population policy may simply be the consequence of action taken in several of these and not in population as such. The *policies perspective* is therefore a critical nexus for understanding the interrelatedness of issues and actors affecting population in the global environment, and serves as the third link between political science and global perspectives.

The final element in our framework, the *future*, signifies the persistence that characterizes the population issue. Technical solutions already exist which would enable us to deal effectively with population problems, but the proper political, social, and economic environment does not exist. So governments do not adopt the "right" policy, or, even if they do, couples do not make the "right" decision. Demographers can tell us what the population will look like twenty or thirty years from now, but hopefully these projections will be wrong. If they are to be wrong, however, it is *politics* which is the reason for this, that is, the playing out of stages suggested above may result in political decisions which will alter the way we function as population actors. Projections on mortality (deaths), for example, in the Third World will decline as modern health procedures are diffused throughout the developing countries. Thus, unless political intervention allows a corresponding drop in fertility (births), population growth rates will increase, and the global problems created by population will grow as the developed world will find itself adversely affected as well. The fourth link, then, between politics and a global perspective is the *future* and futures analysis.

Conclusion

In this chapter we have attempted to define politics and political science and to show how this field of inquiry contributes to a global perspective. Our strategy has been to select the basic steps embodied in what we call the political process, and then to demonstrate how these steps represent necessary stages in understanding topical issues of the day and their global consequences. We could perform the same exercise with all of the issues outlined in Chapter 1, but, hopefully, the population example should provide enough insights into how critical the link is between political science and global perspectives.

NOTES

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CHAPTER 6

An Economic Perspective

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> In a word, prior to the modern era humankind's economic life was decidedly non-global.
>
> In the Sixteenth Century, this millennia old condition began to change. During this century a rudimentary world economy came into existence. In the course of the next four centuries the embryonic world economy of the Sixteenth Century evolved into a global economy that now incorporates in varying degrees and in differing ways all of the world's local, national, and regional economies and makes the contemporary world a single economic unit.
>
> Lee Anderson[1]

Introduction

In examining what economics can contribute to a global perspective, let us begin with a homely example: some of the transactions that might take place in the production and final consumption of a bushel of Ohio corn.[2] Start with the seed. If last year's seed corn crop were inadequate, seed might be secured from a southern hemisphere crop, perhaps Brazil's, in time for planting. Fertilizer could be potash shipped by railroad from Canada. Herbicides and pesticides and gasoline for the tractors and harvesters might be produced from Saudi crude. Sometime between three months before the corn is planted to a year after it is harvested, it is sold to Landmark, Inc. at which time Landmark sells a futures contract at the Chicago Board of Trade. Landmark subsequently sells the corn to Cargill, Inc. (one of a half-dozen big international grain traders) and buys back its futures contract.

Cargill (also hedging with futures contracts) sells the grain to an importer in the Netherlands and, in the ship exchange in London (which also has futures contracts), arranges for shipping from Toledo to Rotterdam. The corn is harvested, trucked to an elevator, loaded in railroad cars bound for Toledo, and finally dumped in the hold of a freighter on Lake Erie. As the ship is bound for Rotterdam, the importer sells the grain to a German feed mill, which in turn swaps this corn for a later shipment ordered by a Polish feed mill, which finally takes delivery.

The processed corn is sold as feed to a Polish hog farmer who sells the fattened hogs to a slaughterhouse where, among other things, hams are canned. The Polish hams are sold to an American importer who arranges for shipping to Toledo. In the meantime, the importer sells the hams to Kroger, which ultimately takes delivery and places the hams on the shelves of stores in Ohio, where one is purchased by a classroom teacher.

The bushel of Ohio corn, either inside the pig or out, was sold ten times (in reality, the grain alone might have been bought and sold fifteen times or more). It was transported by truck, railroad, and ship over six thousand miles. From securing the seed to selling the final product, Polish ham, businesses in eight countries using eight different currencies entered into the transaction.

This is certainly a roundabout way to acquire a ham. Why not feed the pig Polish-grown feed? Why import ham at all, since many pigs are raised and slaughtered daily in the United States? The same questions could be raised with countless imported products we use daily, from automobiles to shirts. Some seemingly crazy situations exist. Consider the case of silicon chips—produced in Taiwan, shipped to the United States for testing and sorting, then returned to Taiwan for assembly into electronic games that are finally sent back to the United States. What accounts for this apparently wasteful behavior?

This chapter explores some of the economic principles that explain the strange case of Polish hams. These principles are central to understanding why economic factors are one force in making the world more interdependent. Next, using OPEC as an example, we shall see how other economic concepts can be used to help understand the actions of others in cultures very different from our own. Finally, consideration is given to multinational corporations, one of the current global issues about which economic reasoning has much to contribute.

Because It's Cheaper—The Economics of Trade

In trying to decide why Polish hams are produced in the way previously described, an obvious answer is that it must be cheaper somehow; or it would not be done this way. Cheaper in what sense and why?

The answer lies in a brilliant idea conceived by David Ricardo (1772-1823) called the principle of comparative advantage, which states: "A country, or individual, having lower opportunity costs than others in the production of some product is said to have a comparative advantage in the production of that product."[3] Suppose a physician is a better typist than her secretary, as well as being a better doctor. Should she do her own typing? Every page she types has an important cost, the lost opportunity to employ her skills as a physician. Her secretary also has an opportunity cost, namely whatever other useful work he might have been doing had he not been typing. As long as the physician's opportunity cost of typing exceeds the secretary's opportunity cost of typing, the secretary has a comparative advantage. It makes sense for the secretary to do the typing even if the doctor is a better typist.[4]

This same principle can be seen in interregional trade within a country. Ohio "imports" oranges from Florida in exchange for other products, say, for example, corn. (The actual exchange is conducted using money, a complication we can ignore for the moment.) For Ohio to produce its own oranges, many resources would have to be diverted from other useful production into the construction of huge greenhouses, energy for heating, irrigation systems, and so on. The opportunity cost in terms of other products not produced would be quite large compared to the opportunity cost of producing oranges in Florida. Thus, Florida has a comparative advantage in producing oranges.

This simple example demonstrates that trade can allow different regions to specialize in the production of those products in which they have a comparative advantage and can promote greater total production as well. More oranges and corn are produced by each state specializing in the product in which it has the comparative advantage than if each state attempted to be self-sufficient in both products.

For a variety of reasons, the fundamental advantages of free trade, so obvious in personal and intracountry trade, are often overlooked in considering international trade. Yet, the same principles apply. Polish farmers import feed from the U.S. because of the comparative advantage enjoyed by U.S. farmers. By specializing and trading, more Polish hams and more feed grain are produced. The people in both countries benefit. With worldwide trade, something resembling an international division of labor results, conferring benefits on all trading partners.

Trade has several other implications for a global economy. For example, trade permits the same output as without trade, but uses fewer resources to produce that output. In other words, it can help to conserve global resources. Trade also benefits consumers by subjecting domestic producers to the rigors of competition. In general, quality will be higher, prices lower, and the range of choices greater where consumers can choose products from a world marketplace. Trade promotes a more efficient use of resources as factors of production are employed where their use value is greatest, as reflected by prices bid for those resources. Trade also implies greater global interdependence as countries specialize in particular products, trading for the other goods they need.

Of course, world trade does not mean that each country will necessarily specialize in a narrow range of goods. The U.S. imports cars from France, Britain, Japan, Germany, Italy, and Sweden in spite of a large domestic auto industry. The degree of specialization is determined by many factors, including the declining efficiency of the productive resources used and the opportunity cost of employing those resources in other uses. For example, at some point it is just as cheap (in the opportunity cost sense) for Ohio to build greenhouses (or import oranges from elsewhere) as it is to drain the Everglades to plant more orange trees. The value of Miami's tourist trade makes the opportunity cost of growing oranges on the beaches too high to expect their conversion to orange groves. Thus, while the principle of comparative advantage demonstrates the sizeable advantages from greater specialization and trade, it does not imply that real patterns of trade will result in complete specialization.

Because of the obvious gains from trading, humankind has engaged in interregional trade for at least 12,000 years (when tribes from Europe and Asia began exchanging goods).[5] As transportation and navigation improved, trade increased rapidly. "Estimates show that the value of world trade increased fifty-fold from 1750 to 1913 . . . From 1913 to 1970 world trade increased 460 [%] . . ."[6] The General Agreement on Tariffs and Trade (GATT), first negotiated after World War II, has helped to lower trade barriers and promote trade. Recent data show that the upward trend continues. "Between 1963 and 1979, world export volume rose 200%, according to GATT, while world production climbed 123%. Trade volume in 1979 alone rose 6%, compared with a production rise of 4%."[7]

In the United States, a dramatic increase in the extent of interdependence with foreign economies is taking place. For example, the value of exports plus imports, expressed as a percentage of GNP, was 9% in 1950. Exports plus imports grew slowly to 10% of GNP by 1960 and to only 12.5% of GNP by 1970. But foreign sector economic activity nearly doubled during the 1970's, reaching 24.5% of GNP by 1980 (22%, eliminating oil imports from OPEC).[8] The export sector as a percent of GNP has tripled since 1955.[9]

Thus, there is no doubt that the use of the phrase "global economy" is truly warranted.

Government Imposed Restrictions on Trade

The explosion in world trade and our daily use of many imported products obscure the reality that relatively free worldwide trade is a very recent development. Only lately have low-cost, rapid, reliable communication and transportation systems emerged that are capable of sustaining a global web of trade. Furthermore, governments erect obstacles to trade for a variety of reasons, often with perverse results. This section examines trade restrictions and some of the reasons why their imposition remains controversial.

There is a continuing perception that exports are good and imports are bad. For example, a surplus of exports over imports is termed a "favorable" balance of trade. This attitude was the foundation of Mercantilism, a dominant economic philosophy of the 18th century. The idea was to accumulate gold and silver by limiting imports, maximizing exports, and pocketing the difference in specie. Adam Smith (1723-1790) exploded this notion (in 1776 in the classic *Wealth of Nations*) by the deceptively simple charge: What good is the hoard of gold and silver? One cannot eat it or wear it. It is useful only to purchase real goods and services for consumption. That, coupled with his realization that trade would permit greater specialization, David Hume's (1711-1776) brilliant analysis of international specie flow, and Ricardo's principle of comparative advantage, spelled the eventual doom of Mercantilism. Indeed, Britain became, at least for a time, a nation of free trade by 1846.[10]

Even today, these theories remain the foundations of free trade for which Milton Friedman has forcefully argued: "Economists often do disagree, but that has not been true with respect to international trade. Ever since Adam Smith there has been virtual unanimity among economists, whatever their ideological position on other issues, that international free trade is in the best interest of the trading countries and of the world."[11]

Nonetheless, trade is restricted by obstacles falling into two broad categories—tariff and non-tariff barriers. A tariff, a tax placed on imported commodities, makes the imported commodity more expensive to consumers and alters the calculation of comparative advantage. If Ohio were to place an import tariff on oranges from Florida (a useful but unconstitutional example) at a sufficiently high rate, the differential in opportunity costs would disappear, along with the advantages of specialization. Similar results occur with tariffs levied by countries.

There are many non-tariff barriers to trade, including: import quotas; import licenses; export subsidies; dumping; buy-domestic-products campaigns; rules, regulations, and product standards; and preferential trading arrangements.[12] Space limitations preclude a full discussion of each of these, but all limit free trade and reduce the benefits of international specialization.[13]

An obvious question is why countries impose tariffs and other barriers if free trade is so wonderful. Are policy makers ignorant? Do they simply not understand basic economics? Let us examine two of the most frequently given reasons for trade restrictions.[14]

First, maximizing economic welfare is but one goal and must be balanced with other desirable outcomes. For example, the stated policy of the U.S. government is to reduce dependence on foreign oil, particularly from the politically unstable Persian Gulf region. As a society, we are presumably willing to trade-off some economic welfare, by imposing quotas on foreign oil imports and substituting higher opportunity cost energy substitutes, in exchange for somewhat greater national security. Similar arguments are made for subsidizing the maritime industry and other sectors thought necessary for national defense.

Second, trade barriers are suggested to protect domestic jobs endangered by cheap foreign labor, as in the case of the current call for "voluntary" Japanese auto export quotas to protect U.S. jobs. In reality, such a policy protects one group of workers at the expense of other workers and consumers while reducing the benefits of trade. To see why this is so, we must carefully analyze the arguments involved.

Suppose Japanese workers are paid lower wages than American workers. What does "lower" mean in this context? Japanese workers are paid in yen; American workers in dollars. We need to know, first, at what rate yen and dollars are exchanged (the exchange rate) and how such a rate is determined. Second, even if Japanese workers have lower wages, that does not mean that their products will be cheaper, since wages are only one factor in determining cost of production. But let us assume that in dollars, at the present exchange rate of about 206 yen per dollar (or .4854 cents per yen), all Japanese goods—cars, cameras, television sets, sound systems, food, everything—are cheaper than U.S. goods. Thus, a U.S. television set might cost $500 (103,000 yen); a Japanese one $400 (82,400 yen). Would this mean that all domestic jobs would be lost and that we would import everything?

Not at all, for two reasons. First, how would we pay for all of these products? If the Japanese will accept green pieces of paper called dollars, the U.S. government could print up a batch and send them over. But what would the Japanese do with them? By assumption, all of their domestic products are cheaper at a rate of 206 yen to the dollar. They certainly would not want dollars to purchase items from us that are more expensive than their domestically produced goods.

In fact, the Japanese would not want dollars at all. They want to be paid in yen, just as American exporters want to be paid in dollars. International currency exchanges perform the function of swapping one currency for another, the exchange rate being determined by the bids for one currency in terms of another.

Suppose we were to offer more dollars on the currency exchange, say, twice as many, for the quantity of yen necessary to purchase the same goods. This is equivalent to changing the exchange rate by doubling the fraction of a cent required to buy a yen (to .9807 cents per yen) or halving the number of yen exchanged for a dollar (to 103 yen per dollar). Now, many goods produced in the U.S. might be cheaper than the Japanese goods at the new exchange rate. For example, a U.S. television set would cost 51,500 yen (500 x 103). At this rate it is possible that more yen to pay for American goods would flow into the currency markets than dollars to pay Japan for their goods. This would result in a further adjustment in the exchange rate, but back in the opposite direction.

This process would continue on a daily basis in the transnational web of foreign currency markets. Thus, even if we begin in a position of complete disequilibrium where all Japanese goods are cheaper, exchange rate changes assure that the value of exports and imports will eventually balance.

Second, recall the principle of comparative advantage. Even if all Japanese goods were initially cheaper than American goods at the prevailing exchange rate, the important comparison is the relative opportunity costs of producing products *within* each country. For example, say that the same resources used to produce one Datsun could produce 100,000 bushels of wheat in Japan, while in the U.S. the cost of producing one Pinto in terms of wheat is 500,000 bushels. In the U.S. the opportunity cost of a car is relatively more expensive (500,000 bu.) than in Japan (100,000 bu.). In Japan the opportunity cost of 100,000 bu. of wheat is relatively more expensive (1 car) than in the U.S. (1/5 of a car). These differences in internal opportunity costs assure that it will be mutually advantageous to exchange U.S. wheat for Japanese cars.

How do exchange rates and the principle of comparative advantage affect our analysis of protection of domestic employment? It is clear that action to restrict auto imports will reduce price competition in the auto market. Consumers will have fewer choices and pay higher prices. It is also clear that there will be more jobs for U.S. auto workers.

But jobs that would have been created in other industries will not be created. Because the Japanese export less to the U.S., there will be less demand in the currency markets to exchange dollars for yen. (The U.S. needs fewer yen to purchase Japanese cars.) The price of the yen in terms of dollars will fall. All U.S. goods, valued in dollars, will become more expensive in terms of yen. Thus, U.S. exports to Japan will fall as will the number of jobs in those export industries. Fewer Japanese tourists will visit the U.S., thereby reducing jobs in those businesses. On the world market some Japanese products will become cheaper than equivalent American goods, further reducing U.S. exports (and jobs).

Therefore, quotas on autos act to protect one group of workers and one industry at the expense of consumers, other industries, other workers, and a general loss of economic welfare through less specialization and trade.

Policy makers often respond to the demands for protection by special interests precisely because the lost jobs are concentrated in one sector and are highly visible. By contrast the jobs never created in other industries and the higher costs to consumers are widely diffused and less visible.

To summarize, the trend is clearly toward a global economy with international markets, greater interdependence, and increasingly efficient methods of currency exchange. But these developments are very recent in the sweep of history. Interdependence imposes costs in terms of the political and economic freedom of nations to act. In crucial areas such as oil, enriched uranium, and advanced technology, other goals often supersede the economic advantages of world trade. And while Mercantilism is dead, its ghost still influences national policy debates whenever the forces of international economics disrupt particular sectors.

Economic Explanation of Behavior in Other Cultures

Part of the beauty of life in a more intimate world is the exposure to the rich diversity of other cultures. One challenge of global education is to help students to understand the customs and the traditions of others—to make others' perceptions and modes of thought intelligible to us. The thesis of this section, using OPEC as an example, is that economic concepts, judiciously applied, can be one useful tool in helping us to understand the actions of others.

Consider a rather extreme example—the apparent rationality of rats—both as an example of applying economic concepts to explain behavior and as a caution against forcing others' actions into a comfortable model. McKenzie and Tullock in *The New World of Economics* report on Kagel and Battalio's experiments with rats, which apparently respond to prices in the same way as humans.[15] Rats pushed levers to receive certain quantities of different soft drinks. By increasing or decreasing the amount received per push, prices were varied. As expected, rats drank more at lower prices than at higher prices. As the price of cherry cola was increased, the rats substituted greater quantities of root beer, much as humans substitute chicken for beef.

The behavior of the rats (and, from other similar experiments, coal tits, snails, and the microscopic Stentor Coeruleus) conforms to economic theory based on expectations of rational behavior. Does this mean that rats are "rational"? Do they "think"? Does economic theory "explain" their behavior? This example illustrates that economic principles often can be applied usefully in unusual situations. It may also caution us that, while it is tempting to fit the actions of others into familiar models, reality might be very different.

With that in mind, consider the pricing and production decisions of the Organization of Petroleum Exporting Countries, OPEC. Douglas Feith notes that Western governments and analysts are confused by the unpredictable actions of OPEC, a confusion (he claims) it intends: "The oil sheikhs encourage their customers to adopt [a] non-economic view of international oil trade. The denser OPEC's mystique, the more potent the oil producers' image, the vaguer and less businesslike their perceived motivations, the more popular the belief that the Arabs, when they produce oil for sale, are doing us a favor."[16]

Stobaugh and Yergin, keen observers of the world energy scene, note that: ". . . Saudi Arabia dominates OPEC and thereby sets world oil prices. But there is no way to determine exactly on what basis the Saudis set the price." They are buffeted by forces "pushing them in opposite directions." Arguing for higher production and lower prices are desires for good relations with the U.S., good economic conditions in Europe, and lower revenues for arms purchases by potential enemies such as Iraq. On the lower production, higher price side are fear of selling its major asset as too low a price and wariness of too-rapid development, Iran's experience a clear warning.[17]

Press reports of OPEC deliberations and decisions present no clear picture, stating that ". . . decisions arise from the oil states' desire 'to tame the market' to avert 'sudden lurches followed by painful periods of economic readjustment,' 'to unify prices,' 'to help reduce the current glut of oil on the world market,' or to perform some other regulatory mission."[18] Some reports of OPEC pronouncements emphasize the need for the West, particularly the United States, to conserve.[19] Or they stress Mideast political objectives.[20] The million-barrell-per-day hike in Saudi production during July 1979 was reportedly proclaimed by Prince Fahd to be a "birthday gift" to the U.S.[21]

Given this confusion, it is clear that how one interprets OPEC decisions is largely based on the analytical tools brought to the task. While foreign policy experts, using their concepts, might arrive at one set of conclusions, many economists have arrived at a different understanding by using economic theory. They believe OPEC (and particularly the Saudis) acts like a monopolist, its pronouncements on bringing order to the market, Mideast politics, and birthday gifts being gratuitous. Economist Robert L. Welch writes:

> The behavior of Saudi Arabia is perfectly consistent with a profit maximizing monopolist. Price has been set so that world demand is no longer inelastic. Production is cut when the market is soft (along with dire warnings to the U.S. about its friendship towards Israel and requests for more F-15s). Production is increased when the market is tight (along with the praise for the U.S. in taking a hard line toward Israel).[22]

To understand this explanation, let us begin by contrasting oil pricing decisions under competitive conditions with those under present conditions. If a market is perfectly competitive, producers are price-takers, i.e., they may sell all of the product they can produce, but only at the equilibrium price determined by the forces of supply and demand. No individual producer can influence price by withholding its product from the market. The amount a firm produces depends upon its particular costs of production. The firm will expand output until the value received for the last unit produced (in economists' jargon, "marginal revenue") is equal to the cost of producing that unit (marginal cost). No firm would willingly continue to produce additional units when the cost of each one exceeds the revenue received.

This is clearly not the picture of world oil pricing and production decisions. OPEC members produce nearly all of the oil available on the world market. Saudi Arabia dominates OPEC, accounting for "30% of total production and 34% of total reserves."[23] When sudden shifts in supply occur, as when Iran stopped producing in early 1979 following the fall of the shah, price responses are large. Iran had been producing 5 mbd (million barrels per day), about one-sixth of OPEC production. Other producers, primarily the Saudis, filled 3 mbd of the shortfall.[24] But the shortage of 2 mbd sent prices skyrocketing, 40% by March, then 60% and finally by year's end, 100%.[25] This is evidently not a market filled with price-taking competitors.

Rather, many economists believe that OPEC makes decisions as a monopolist, setting the level of production that will achieve prices that maximize profits. It is important to understand that achieving the end of profit maximization will sometimes require production cuts, but other times increases, depending upon changing demand conditions. Under some conditions, the monopolist will earn more by selling less but charging higher prices than he was before. (Economists call this the inelastic portion of the demand curve.) Under other conditions, the monopolist would do better to sell more at lower prices (the elastic portion). He seeks that level of output where further increases or decreases in output and prices will not benefit him (the point of unit elasticity which occurs where marginal revenue equals marginal cost). Thus, many economists think that production decisions by OPEC, whether they are increases or decreases, have more to do with what level of production it thinks will maximize profits than with politics.

To complete the economic puzzle of OPEC production decisions requires one further but important piece—OPEC is a cartel, i.e., several producers colluding to form a monopoly. This is extremely important in understanding the actions of individual countries, particularly Saudi Arabia. The monopolist has only one level of production that maximizes profit since he faces only one set of production costs. But each cartel member has different costs and, hence, a different level of optimum price and output. There may be an optimum level of output for the cartel as a whole, but that leaves the question of how to share the output among cartel members, an issue that has never been resolved by OPEC.[26] Therefore, there is pressure for each member to go its own separate way in setting production and asking price. This is a major reason why there is so much haggling at OPEC meetings and such great discussion of the need to "unify prices." It is also why the actions of Saudi Arabia are so important. As the lead producer, it has the key position and the greatest interest in maintaining discipline in the cartel. Thus, many observers interpret Saudi actions as balancing their desire to maximize their own profits with the goal of holding the cartel together.

This is certainly not the only way of looking at OPEC behavior. Indeed, if one begins by asserting that profit maximization is not the major objective of the Saudis, one might end up with very different conclusions. Nonetheless, as this example demonstrates, economic principles can be a valuable tool in attempting to understand others.

Multinational Corporations—Friend or Foe?

Whether it be the Ohio corn discussed in section one, the OPEC oil from section two, or some other product reaching world consumers, chances are good that at least one multinational corporation (MNC) will have been involved in the production of the product at some stage. It might be that an

MNC supplied the raw materials, built the machinery used in the production process, secured the fuel for transportation, provided financing to the producer, or produced the product itself. In fact, the image of the global economy wherein firms within a country trade with firms (or governments) in other countries is giving way to one of transnational companies that "internationalize the production of goods and services."[27]

The rising importance of MNC's has promoted vigorous controversy. Some have argued that multinationals are too big, too powerful, and beyond accountability to the world citizens they serve. They have charged that MNC's exploit Third World countries and contribute to inequality of wealth on a world scale. Others have found MNC's to be a rational outgrowth of a global economy, an efficient mechanism for stimulating world trade, and an engine of wealth creation for the world. This section provides a brief outline of the nature and activities of multinational corporations.

There are many definitions of what constitutes a multinational corporation. One broad standard is "companies with assets in more than one country. Using this definition, 1973 estimates put the total number of such companies world-wide at 10,000."[28] (This figure is used in the previous chapter.) A more restrictive definition places an arbitrary lower limit for foreign sales as a percentage of total sales, 25%, for example.[29] Another expert defines an MNC as ". . . any firm which has a number of directly controlled operations in different countries and which tends towards a global perspective."[30]

By most definitions, there are thousands of MNC's in a bewildering variety of sizes, styles of operation, degrees of diversification, and locations of home offices. The largest are very large indeed, with total sales greater than the GNP's of many countries.[31]. Others are small operations with a few million dollars of overseas sales to a handful of foreign customers.[32] While multinationals were once predominantly based in the U.S. (71% of the largest companies in 1959), by 1976 56% of the largest MNC's were based elsewhere.[33] Interestingly, the number of multinationals located in the developing countries ("Third-World multinationals") is rising sharply.[34]

This fluid and varied situation makes it extremely difficult to form accurate general statements about MNC's. Different definitions, by focusing on sales, or assets, or location of production facilities, change the set of MNC's considered and, perforce, conclusions about their activities. Little controversy is created by the small companies which make foreign sales, companies which are, nonetheless, multinationals by some definitions. Rather, the battle is over large MNC's, however defined, with far-flung operations and tremendous diversity—the 300 or so that "may control 75 percent of the world's productive capability . . ."[35] It is on these that the following sketch of the controversy will concentrate.

Power and control—these are at the heart of the attack on MNC's. Opponents fear that these enterprises have tremendous economic power which can be and often is translated into political and even military power.[36] Of particular concern are relationships with Third World countries. It is argued that these relationships are characterized by "dependency" with giant multinations "dominating" weak nations. Indeed, the portion of a less developed country's domestic economy affected by foreign operations can be substantial.[37] Some charge that MNC's bribe local officials,[38] subvert the host government's political processes, and overturn governments.[39] The most radical analyses posit an international conspiracy of business interests and Western governments engaged in a capitalist exploitation of the world's workers.[40]

Other investigators dispute the extent of the political and military influence of the multinationals. For example, Louis Turner (not known as an apologist for MNC's) has concluded that little recent evidence exists for these charges. "Companies are not meddling in any significant way with the domestic policies of particular countries. There is little evidence that they are persuading intermediary bodies like the CIA to do the job for them."[41] Raymond Vernon, recognized as a leading authority on multinationals, thinks that political power only slightly explains the arrangements between enterprises and host countries.[42]

A more widely shared concern of both developed and less developed nations is that of control. Vernon argues persuasively that, as many factors combine to heighten world tensions, individual nations are experiencing reduced ability to control events that affect their interests. In this environment, the multinationals are seen as yet another factor spinning out of national control. For example, during the Arab oil embargo, British Petroleum (48% owned by the British government) failed to comply with government requests for extra oil. BP had other "contractual obligations." Prime Minister Heath reportedly had a "temper tantrum."[43] Vernon concludes that "The capacity of any government to command a particular firm to undertake a specified task in support of a public policy . . . has been reduced."[44]

If the industrialized countries are experiencing a loss of control over multinationals, one can imagine the threat perceived by the weaker host nations. Ironically, as the home governments are losing control, host governments continue to view the multinationals as instruments of the home governments.[45] But some observers argue that in spite of the less developed countries' perception of lack of control, their actual power over multinationals has increased for several reasons. First, the power of the industrialized nations to influence Third World countries has declined and with it the home government's protection of the foreign operations of MNC's.[46] Second, MNC's foreign operations are under the control of the host government.[47] Third, the management style and organization of many multinationals place much decision-making authority with the local subsidiary rather than the headquarters.[48] Thus, Turner concludes that "the balance of power [has shifted] firmly away from the multinationals."[49]

There is a long list of other indictments lodged against multinational corporations. We can but list a few. MNC's introduce inappropriate technology and products into the Third World; they exploit Third World resources; they engage in a variety of monopolistic practices; they repatriate excess profits to the detriment of the host governments; they thwart Third World development by not investing enough, investing too much, making the wrong kinds of investments, and driving local competitors out of business by being more efficient. And, of course, the defenders of MNC's believe these charges to be false or greatly exaggerated.

In spite of all the controversy, multinational corporations seem to be here to stay. Like increased trade and OPEC, they are products of a truly global economy. They are an outgrowth of the forces that have created a smaller world. As Raymond Vernon puts it, "If scientists and engineers had not found a way to shrink international space over the past century or so, the odds are high that the multinational enterprise would be a rarity today."[50]

NOTES

1. Anderson, Lee, *Schooling and Citizenship in a Global Age: An Exploration of the Meaning and Significance of Global Education.* Bloomington: Social Studies Development Center, 1979, pp. 130-131.

2. This example is adapted from one used in a presentation by Raymond Casey, Vice-President, Marketing, Landmark, Inc.

3. Starr, Philip C., *Economics: Principles in Action.* Belmont: Wadsworth Publishing Co., Inc., 1978, p. 322.

4. This often used example can be found in many sources. See, for example, Rosen, Daniel, *The Basics of Foreign Trade and Exchange.* New York: Federal Reserve Bank of New York, n.d., pp. 2-3 and Friedman, Milton and Friedman, Rose, *Free to Choose.* New York: Harcourt Brace Jovanovich, 1980, p. 45.

5. Rosen, *The Basics of Foreign Trade and Exchange*, p. 2.

6. Anderson, *Schooling and Citizenship in a Global Age: An Exploration of the Meaning and Significance of Global Education*, p. 134.

7. Malabre, Alfred L., Jr., "Trade Is Playing Fast-Growing Role in Economic Picture of the U.S.," *The Wall Street Journal*, Vol. 196, No. 96, November 13, 1980, p. 56.

8. *Ibid.*

9. McCracken, Paul W., "A United States Industrial Policy," *The Wall Street Journal*, Vol. 197, No. 7, January 12, 1981, p. 20.

10. Friedman and Friedman, *Free to Choose*, p. 39.

11. *Ibid.*

12. Starr, *Economics: Principles in Action*, p. 325.

13. There are important differences between the different kinds of trade barriers. For a complete discussion, see Kreinin, Mordechai E., *International Economics: A Policy Approach.* New York: Harcourt Brace Jovanovich, 1975, Chapters 13 and 15.

14. There are many other reasons. One is the "infant industries" argument. Another is a sophisticated argument casting the choice as between marginally greater and smaller barriers rather than between free trade and no trade. The interested reader should see Starr, *Economics: Principles in Action*, pp. 323-327, Kreinin, *International Economics: A Policy Approach*, Chapters 13 and 15, and Lipsey, Richard G. and Steiner, Peter O., *Economics.* New York: Harper & Row Publishers, Inc., 1969, pp. 712-714.

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16. Feith, Douglas J., "Love and Oil," *The New Republic*, Vol. 183, No. 21, November 22, 1980, p. 20.

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CHAPTER 7

An Anthropological Perspective

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Anthropology as a Discipline

Anthropology is the study of the continuous stream of human phenomena. It includes all aspects of culture that are past or present. It incorporates structures and functions of human groups and the changes that occur in these structures and functions. Anthropology is historical, psychological, and philosophical, for it focuses on human chronology, personality, and relationships to the cosmos. Anthropology has many perspectives. It views humans from biological aspects (animal origins and nature), environmental factors (both those that affect and are created by humans), language (verbal and nonverbal modes of communication), and other aspects that are unique to the human community and derivative of the above. These perspectives are formally grouped into areas of study named biological, linguistic, cultural/social anthropology, and archaeology. Finally, anthropology contributes to the study of how humans live, interact, and build cultures collectively as cultural groups whose customs are best understood both in terms of psychological and cultural perspectives.

A unique feature of anthropology is that it views human beings in global terms for the obvious reason that humans are ubiquitous. It is primarily this feature that makes anthropology particularly germane to global education. This global existence is characterized by a long history dating back several thousands of years and by cultural variations and universals. Culture, a total lifeway of all human groups, has significantly influenced how humans think, act, and view the world to which they adapt everywhere in space and time.[1] The three variables that are basic to this experience are: information received from the past; the acquisition of such information; humans modifying, adding, and deleting such information.[2] The four distinctive qualities of anthropology through which an anthropological understanding of human existence has been achieved are: the study of humankind as a whole (holism), the development of the concept of culture and the significance of this concept in anthropological thought, a strong commitment to the use of the comparative method, and an emphasis on fieldwork for collecting anthropological data.[3], These qualities are discussed briefly below.

Holism

Anthropology attempts to cover the WHOLE scope of what humankind is in order to arrive at generalizations. It tries to present a composite view of a cultural system as a functional whole in which all parts relate to each other as components of one system. Hence, what happens in any component of the system invariably has some effect on the structure and the functioning of the whole. Religion, politics, values, kinship, education, and economic organization are, according to this view, regarded as interconnected parts of a sociocultural system. Unless we relate these parts to each other in an effort to see how they are tied together, we cannot achieve a good understanding of a cultural system.

Comparison

Anthropology emphasizes a comparative approach to the study of cultural systems. It compares society with society, tradition with tradition, over space and time. It attempts to identify likenesses and differences in order to arrive at generalizations. It tries to determine the common and the unique features of human behavioral patterns.

Fieldwork

Direct, person-to-person involvement in the lives of the cultural group being investigated is a major characteristic of anthropology. The core of fieldwork is participation and observation. As participants, anthropologists live closely with members of the society they have chosen to study, sharing in the people's day-to-day activities. But they also remain detached from the people's lives to some degree. They are there to understand the people's way of life and then to report such understanding to others. Hence, complete involvement is incompatible with the anthropologist's primary objectives.

Culture

The shared patterns of learned behavior and beliefs constituting the totality of a people's way of life are their culture. Culture embraces the sum total of tools, thoughts, acts, and institutions of any given human group.

The Components of an Anthropological View of Humans

The anthropological view of humankind is in terms of four aspects: biotic, psychic, social, and cultural.[4] The biotic aspects of humans include what is necessary for the physical survival of individuals in the human phylum; the psychic aspects include what is necessary for the development and survival of the human personality. Related to these are the social aspects, which include sexual relations, care for the young, and other individual needs and phyletic drives that contribute to stabilizing a given social system. Cultural aspects everywhere are derived through language as the means for transmitting knowledge from one generation of humans to another. Because culture separates humans from nature, it creates in them non-biological needs that are essential for the survival of individuals. Among these cultural needs are family, economic systems, language, political system, and all social structures that once established become as necessary for human survival as biological needs.

Human beings everywhere construct their beliefs and adapt their behavior in response to the same basic cultural needs and problems. Their needs include security, other human beings, learning, food, clothing, shelter, and explanations for observable phenomena. The solutions they have developed for these essentially similar cultural needs have been enormously varied in time and space. These solutions clearly demonstrate that human flexibility and creativity are among the most precious pan-human qualities possessed by the human species.

Anthropological Insights in a World Society

Anthropology is useful for providing insights that can help us examine in global terms our cultural past, assess our present condition, and critically evaluate our future. The discussion that follows delineates the major anthropological insights that are pertinent to an emerging world society and to global education.

1. We are one species on one globe.

Only one species of hominid, *Homo erectus*, lived on this planet after 500,000 years ago. A transition gradually occurred from *Homo erectus* to the earliest *Homo sapiens*, and subsequently, to the modern *Homo sapiens* to which we all belong. By about 250,000 years ago, the transition to modern *Homo sapiens* had been completed. Since then, human beings everywhere have been simultaneously selected for their ability to live as cultural beings. Hence, today there is only one human species whose members have been simultaneously selected for language competence, intellectual capacity, and the various human qualities that we now possess.

2. Human variability and uniformity are global phenomena.

All human beings, as members of the same species, are one in their capacity to take on new ways of life or adapt to new ecological niches. As a result, there have always been great, in fact almost infinite, global variations in the content of the various cultures. The morphological differences between different human populations have also been equally numerous. Each cultural variability has always been internally coherent and logical, and each morphological variation has always possessed its own adaptive significance.

Variability is, of course, not the whole human story. There are, in addition to the global variability just mentioned, numerous and very widespread cultural patterns found in every known human society. It should be reemphasized that these include systems of sex, marriage and family, differentiation in age and sex, recreational or play activities, governmental functions, systems of religion, knowledge, and economy.

3. Culture is essentially biocultural, because humans everywhere have been both biological and cultural beings.

The cultural and biological interconnections that made us eventually human occurred with the beginning of an elementary form of culture over two million years ago among the various Australopithecus groups in Africa.[5] This elementary form of culture occurred before the hominid organic development reached the level attained by our omnipresent species, the *Homo sapiens*.[6] Hence, the last stages of the biological evolution of humans everywhere occurred after the beginning stages of cultural development.

4. The visible morphological differences among human groups are globally adaptive.

The physical differences of the different human populations known as "races" might have occurred between 50,000 to 120,000 years ago.[7] Hence, in the words of Geertz, "Modern races are just that: modern. They represent very late and very secondary adaptations in skin color, facial structure, etc.—probably mainly due to climatic differences—as Homo sapiens dispersed throughout the world toward the close of the glacial period."[8]

5. Behavioral differences among human populations are global and learned.

Nearly all the significant differences in the way different human groups have behaved in the past or are behaving in the present can be understood as behavior patterns they have learned culturally rather than biologically programmed and inherited behavior patterns.

6. Our daily lives are constantly involved in a global network.

Even though we are unaware of the complex global relationships surrounding us, the fact remains that our daily lives are either directly or indirectly affected by the economic or political events occurring in other parts of the world. During the last fifty years, the process of globalization has occurred at an unusually rapid rate. Among the major factors that have contributed to this process of globalization are (a) invention and diffusion of technological innovations; (b) various political movements that have resulted in the transformation of several European colonial territories into modern nation-states in Africa and Asia; (c) the emergence of non-state organizations with prominent, recognized, and effective roles to play in world affairs. Examples of such non-state organizations are the United Nations, the European Common Market, the Economic Communities of West African States, the Red Cross, General Motors, the Ford Foundation, Operation PUSH, and ethnic-group organizations.

Conclusion

Anthropological concepts can be very useful in making people become more knowledgeable about their global connections and helping them acquire the needed information about their local connections to our emerging global village.

The various anthropological concepts that are relevant to this kind of understanding can assist educators to obtain the knowledge and skills that are necessary for the development of a global perspective. They can also help teachers develop their own global perspective. Such anthropological concepts as "acculturation," "cross-cultural sensitivity," "intercultural communication," "the global individual," "the emerging global culture," and "species membership" should be incorporated into social science curricula that aim at introducing a global perspective to teachers and students.

The world has shrunk so much in our present life that the fate of all humans is tied together. The growth of numbers and technology on our planet has made all of us more interdependent. Hence, there is a global order for us to build so that we may solve the global problems of conflict, ignorance, and ethnocentric myopia that will become increasingly prominent in future cross-cultural interactions.

We must face up to the needs of a dynamically growing world in which the fate of every person and every nation affects the fate of other persons and other nations.

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CHAPTER 8

A Scientific and Technological Perspective

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Introduction

This chapter is being written in the wake of one of America's greatest technological achievements—the successful flight of the space shuttle *Columbia*. This event was the capstone of a long series of successful space accomplishments that have fundamentally changed humankind's perception of its habitat, the world, and its relationship to that habitat. John Glenn's successful orbit of the earth dramatically shrank our world to less than an hour and a half in circumference. Our perception of the world's size diminished even further when the astronauts relayed back pictures of the earth from the moon and we saw for the first time an earth-rise over the horizon of the lunar surface. In one glance we could take in the entire surface of the earth. The earth appeared as a blue marble floating in limitless black space. American and Russian exploits have provided a spectacular setting in which to consider global education and the priority it should assume in our total educational effort.

The technological achievements of the space age and especially the recent flight of *Columbia* have presented humankind with endless frontiers to be explored and used for the benefit of all. We will have within our capability, for example, the transport of minerals from the moon and asteroids to factories in orbit around earth, thereby making abundant resources available. Gravity will be neutralized in such factories, simplifying many industrial processes that are difficult and expensive to conduct here on earth. Industries are already interested in the use of space for industrial processes such as growing crystals used in manufacturing the semiconductor chips that are the basis of modern electronics. Crystals grown under zero gravity could be larger and more uniform than those now grown in factories on the earth's surface. We also will have the capability of obtaining limitless energy from the sun, using solar energy collectors placed in orbit by advanced versions of the space shuttle. These material benefits can extend to all the people on earth. However, more important than these benefits will be the expansion of the frontiers of knowledge provided by such technological achievements. We can now see eight billion light years into the past; half way to the beginning of the universe. Orbiting telescopes placed outside the earth's atmosphere will permit us to look even further into the origins of the universe. Already we have seen sights in our own solar system that no one had predicted. The recent *Voyager* flybys of Jupiter and Saturn have provided us with spectacular views, such as erupting volcanos on Io—a moon of Jupiter—and a thousand rings around Saturn. Space programs are providing the human race with a startling new perception of its place, not only in our world, but also in our solar system and in our universe.

Science and Global Education

The accomplishments just referred to are technological. They are applications of the accumulated principles and facts uncovered by the work of thousands of scientists throughout history. One of the basic problems in achieving a global perspective is to establish understanding among peoples across barriers of language and culture. Science can provide a useful model for achieving this understanding. Japanese scientists converse with American scientists, who converse with Russian scientists. Scientists of all language and cultures have a subject of study in common—nature—and a process they apply in studying. Scientists start with an unbiased description of facts. They then logically develop arguments and interpretations based on those facts. This approach of science can provide a model for achieving dialogue among peoples of different languages and divergent cultures.

What is science? In simple terms it is observation—a careful, meticulous and accurate collection of data. It is analysis—the study of data for relationships. It is interpretation—the development of relationships into a general statement, hypothesis or theory. Science is a human endeavor—not individual, though individuals comprise the scientific work force. One scientist will uncover information and subject it to analysis and interpretation. Another will challenge the results and attempt to replicate them. And yet another scientist will attempt to replicate the results of the first and second.

Scientists, as individuals, are human—with all the frailties and fallibilities of the human state. They make mistakes. They may even intentionally falsify data. But science has correcting mechanisms which, given time, tend to diminish the influence of the shortcomings of the individual. Mistakes and falsified data will be revealed by the work of others. The result of this process is a product that is honest and that accurately represents nature in as far as the available evidence allows. Science, therefore, is ethical overall. It is not influenced one way or another by current political winds or social convenience. Its basic value is honesty. It simply seeks the best representation of the natural world. Therefore, science is amoral; that is, it does not seek right or wrong. It simply seeks the best explanation. Leaders in government, industry, business and society select from among the principles and information made available by science, often with the advice of individual scientists. Science is used by these institutions in ways others may judge as being right or wrong, moral or immoral. Our future leaders and citizens must understand science as a process for discovering more about ourselves and about our world. They must recognize that the application of information produced by science can benefit or damage the lives of all if they are to make wise decisions regarding the uses of science. Our leaders must be prepared to draw on scientific findings not for their own self-interest but for the sake of the common good—not in the narrow self-interest of their country and its citizens but in the interests of all the world's people.

If this understanding is to be developed, it is clear that science must be an integral part of global education.

Plate Tectonics as an Analogue of Global Education

The past two decades have seen a tremendous explosion of scientific knowledge and consequent revolutions in science concepts and theories. The field of earth science, for example, has seen the theory of plate tectonics mature from a harebrained scheme called "continental drift," first proposed in 1912 by a young meteorologist, to become the unifying theory for the geological sciences. Plate tectonics provides, in science, a model of what global education can be for education. Prior to the 1960's, geologists, applying the techniques of rock and fossil identification and mapping of rock units and structures, studied and mapped a myriad of apparently unrelated pieces of information about the crust of our earth. They invented theories about how mountains were built and how plains were eroded; how igneous rocks originated and how metamorphic rocks were formed; how continents evolved and oceans occurred. But these theories had little in common. Additionally, many data simply could not be explained by any of the many theories.

By the 1950's, chemists and physicists had developed techniques for determining the ages of igneous rocks, such as those formed from volcanoes. These techniques were applied to determining the ages of volcanoes in the Atlantic Ocean. In 1964, a Princeton professor, Harry Hess, suggested that the ages of the volcanic islands on either side of the mid-Atlantic Ridge could be explained by an idea he called "sea floor spreading." That is, the mid-Atlantic Ridge represented a gigantic crack in the crust along which material from below oozed upward, cooled and provided new crust. In the process, it pushed aside the older crust and, along with it, the continents. According to Hess, then, the Atlantic Ocean, centimeter by centimeter, year by year, was becoming wider through this process of sea floor spreading.

Parallelling Hess' work, a graduate student at Cambridge University was studying some puzzling data provided by physicists on magnetic anomalies that had been found on either side of the mid-Atlantic Ridge. He saw in these anomalies proof of Hess' concept of sea floor spreading. An article by the Cambridge graduate student, which appeared in the geological literature, alerted geologists and geophysicists to the reasonableness of sea floor spreading. From that point on, convert after convert within the scientific community came to embrace the concept that Harry Hess had introduced. Some of the new biologist converts, studying fossil reptiles found in Antarctica, provided additional supporting evidence in the late 1960's. Sea floor spreading and the idea of continental drift have now been transformed into a total global theory called "plate tectonics," which accounts for most, if not all, of observed features and processes of the earth's crust. Earthquakes and volcanoes occur along the margins of great plates comprising the crust. Mountains are built at these margins. New oceans, such as the Atlantic, evolve. Old oceans, such as the Pacific, are destroyed. This revolution in geology was possible because of the contributions made by scientists from several countries working in a variety of disciplines, including chemistry, physics and biology, as well as geology.

In a sense, global education seeks to provide an all-encompassing structure for education, just as plate tectonics has done for the geological sciences. It seeks to tie together concepts from all disciplines to help the individual understand the world—not just the physical world, but the cultural, the social, the political, the economic world—and not just in Ohio or in the United States, but across the globe.

The Effects of Technology

Science provides knowledge that can be used to improve the living standards of people. Industrial and political leaders make decisions regarding the use of this knowledge. This knowledge then enters the sphere of technology. Technology does not have the self-correcting mechanisms of science and, therefore, lacks its ethical base. Knowledge can be used in different ways—for the long-term benefit of all, for short-term political gain, or for destructive purposes. Even when used for the most beneficial purposes, the technological use of knowledge can be destructive if inadequate consideration has been given to the long-range results. High technology, for example, requires the expenditure of energy. The manner in which our leaders have responded to this need for energy reflects their failure to understand the long-range implications of excessive energy consumption. All too often, decisions have been made that maximized the short-term gain or profit from energy use, but resulted in problems with which we are now forced to deal.

Technology has, on the one hand, lightened the work load of those of us in the industrialized countries, but it has also placed tremendous demands upon the energy resources of this planet. For example, our exploitation of fossil fuels—including coal, oil and natural gas—has had lasting detrimental effects upon our environment. Some are readily recognized: the ravaged landscape of strip-mined areas and the oil spills from damaged tankers. Other effects, though more subtle, are perhaps much more threatening to our survival. One effect of global concern is the introduction of carbon dioxide, a gas, into the atmosphere, through the burning of fossil fuels.

Although most fossil fuels are burned in the Northern Hemisphere, higher than normal levels of carbon dioxide have been observed throughout the world. Carbon dioxide has unusual properties. It is transparent to light, but not to heat. Light coming from the sun passes easily through the atmosphere to strike the earth, where it is changed to heat, which in turn radiates back into the atmosphere. The heat that strikes carbon dioxide molecules will be absorbed, or reflected, by them, remaining in the atmosphere, while the rest of the heat radiates into space. This is called the "greenhouse effect." Since the natural content of carbon dioxide in the atmosphere is small, there is very little heating because of it. However, over the past forty to fifty years, we have added about ten percent additional carbon dioxide through the burning of fossil fuels. This amount could have a warming influence on the world's climate. Carbon dioxide levels in the atmosphere, however, have risen, not by 10%, but by less than 5%. Where did the missing gas go? Part of it might have been incorporated in the tissues of green plants, but most of it has been absorbed by our ocean waters. Carbon dioxide, like all gases, becomes more soluble in colder temperatures. Ocean water at the high latitudes, both North and South, is very cold and will therefore absorb a great deal of carbon dioxide from the atmosphere. Also, it is so cold that the ocean water freezes. As the water freezes, its salt is left behind, making the remaining water not only very cold, but also very salty. This combination of characteristics results in very dense water that sinks to the bottom of the ocean, carrying the carbon dioxide along with it. This is what has happened to the missing gas that resulted from the burning of fossil fuels. If carbon dioxide levels in the atmosphere continue to increase, the surface waters eventually may become saturated and no longer able to absorb the gas being produced. The carbon dioxide content of the atmosphere will then build up rapidly, and along with it, the greenhouse effect and consequent warming of the atmosphere. As the atmosphere warms the surface, ocean water near the poles will also warm. It may reach a point where the oceans, instead of absorbing carbon dioxide, may release it, causing an even greater build-up of the gas in the atmosphere. If we allow this process to go on long enough, it could become a runaway system that would threaten the very existence of life on earth.

Recent Russian and American space probes have found a very high concentration of carbon dioxide in the Venusian atmosphere. They have also revealed surface temperatures nearing 800 degrees Celsius. Might Venus be a model of the earth some time in the future if we fail to control our appetite for fossil fuels? Scientists do not know. Our political and industrial leaders and our citizens must understand these types of uncertainties about how the natural systems of our earth function and what our impact might be upon those systems. There are alternatives to the use of fossil fuels, such as nuclear energy, solar energy and conservation. To shift our emphasis to these alternatives, however, requires understanding, commitment and leadership.

A striking example of the application of the results of scientific inquiry to commercial uses without adequately investigating the possible detrimental effects is the case of polychlorinated biphenyls, or PCBs. PCBs are petroleum derivatives that have remarkable insulating capabilities. These compounds have also been used in producing certain types of plastics. Through the 1950's and '60's, many products were made using PCBs. They ended up in landfills, dumps and incinerators around the world. The tragic effect of this chemical on human life was revealed in an event in Japan in 1968, when four people died from a mysterious disease. More than 1,000 others suffered symptoms, such as stillbirths, miscarriages, skin disease, nervous disorders, hearing loss, and discharge from the eyes. The one thing that all of these people had in common was that they had eaten rice oil prepared at the same plant. The plant had used PCBs as a coolant in pipes that circulated through the hot rice oil. The pipes had developed leaks, discharging PCBs into the oil, which was eaten by those who developed the disease. In some patients the symptoms continued for three years after the rice oil was consumed. In the United States we have had to curtail commercial fishing in Lake Michigan because of the dangerously high PCB content of trout and coho salmon. Some of the PCBs were carried into the lake by ground water that had passed through garbage dumps containing the chemical. Others were carried through the air from burning plastics containing PCBs. In each case, the PCBs ended up in the food chain, being concentrated in the trout and coho salmon, where they pose a health hazard to people consuming the fish. The PCB problem is just one of many resulting from our inadequate understanding of all possible consequences of applying scientific knowledge.

We must learn from past mistakes and be especially alert to how we use information from future scientific discoveries. For example, there have been dramatic breakthroughs in genetic research, such as amniocentesis, a technique to identify genetic disorders in unborn children, and gene splicing, a technique for designing new plants and animals. This knowledge is just now beginning to be used. Gene splicing, for example, is one of several procedures that comprise the new field of genetic engineering. In fact, at least one corporation has been set up solely for developing and marketing new products resulting from genetic engineering. These developments pose ethical and moral questions that are not answerable within the domain of science. They are questions that must be faced in the social, political and philosophical arenas. What children should be allowed to live? Who makes the decisions? What new life forms should be created? For what purpose? How should they be controlled? We must be prepared to deal with such questions now before the technology has out-stripped our social institutions.

Global Education, Science, Technology

Kenneth Boulding, in his presidential address to the American Association for the Advancement of Science in January of 1980, drew an anology concerning science. The address was delivered on the twelfth day of Christmas, which, in the Western church, is celebrated as the day of the Magi, or the three wise men. Boulding stated:

> In the first year of the child [the Magi] came bearing gifts, and strangely enough these are deeply symbolic of the gifts of science. Gold symbolizes the great increase in riches that science produces. . . . Frankincense symbolizes the joy of science, the sheer delight of discovery, the excitement of the Mars pictures, the volanoes on Io, the double helix. Myrrh symbolizes the bitterness, the wormwood and the gall, the chemical waste and the nuclear weapons, the agonies of doubt. Perhaps we have to have all three. But also there is hope: that we can lessen the third, increase the second, and control the first.[1]

Through global education we can meet Boulding's hope. Teachers of all disciplines, especially elementary school teachers, need to recognize the importance of science in the curriculum, not simply as science per se, but in its relationship with the social, political and economic spheres of human endeavor. We must focus on science as a process, a way of thinking, a way of approaching reality, a way of solving problems. But we must also consider the products of science. They can be used for the betterment of our life on earth. However, their use can also be destructive if used in conflict. It can despoil our habitat if resources are used unthinkingly. It can cause human health problems because of casual regard to hazardous industrial wastes. Finally, we must be sensitive to the stress that technical applications of scientific knowledge can impose on existing social structures.

An Infusion Model for Incorporating Global Education

To accomplish the goals referred to above, all teachers must consider the implications of science for their curriculum areas. Science teachers have a special responsibility to deal with the social implications of the use of the products of science. How can this be done, given the tight time constraints of the existing curriculum? Can teachers who already have more to do than can realistically be accomplished in any given day, week or semester be expected to assume yet another responsibility? Those of us working in marine and aquatic education have developed an infusion model for incorporating marine topics into the curriculum that could prove of some help.[2] Marine education is closely akin to global education and, in fact, can be considered subsumed under it. The infusion technique should be equally appropriate for introducing an international dimension to the curriculum. Through Ohio Sea Grant, we have developed a series of investigations designed around basic topics or concepts already taught in middle school curricula. They are unique in that they use a marine or aquatic focus—instead of a land focus—in developing the topic or concept. In addition, they draw upon a variety of disciplines in addition to science and the social studies. They are short and self-sufficient and thereby easily inserted into existing curricula.

An example of the infusion technique is the investigation entitled *It's Everyone's Sea: Or Is It?* It explores the interests of different types of countries in using the sea as a resource.[3] It starts with a map reading exercise. Students identify the topographic features of the Atlantic Ocean Basin and locate the major resources, including potential oil reserves of continental shelves, manganese nodule deposits in some of the deep ocean basins, and the major fishing areas. They also examine the positions of eight countries relative to the seas, ranging from landlocked nations, such as Bolivia, to island states, such as Bermuda. The second part of the exercise is a simulation of the Law of the Sea Conference. The class is divided into eight groups representing eight different countries. The countries present their respective positions when debating four proposed resolutions concerning rights to free passage of ships, pollution control and the allocation of sea resources. In the third part of the investigation students examine the manner in which international borders are designated and analyze sources of border conflicts between Canada and the United States. Through this activity, students learn that problems of resource use are not solved merely by the technical application of scientific knowledge. Rather, they require informed guidance by political specialists, frequently in an international context.

Applying this type of infusion approach as used in marine and aquatic education to global education should facilitate the rapid evolution of existing school curricula toward a truly global perspective.

Conclusion

Rod Nash, Professor of History at the University of California-Santa Barbara and a well-known wilderness advocate, has described what he calls the evolution of ethics as it has proceeded from the past and will proceed into the future.[4] This evolution is represented in the following diagram:

The Evolution of Ethics in Civilization

Future	Environment
	Life
	Plants
	Animals
	Mammals
Present	Humankind
	Race
	Nation
	Tribe
	Family
Past	Self

Early in our civilized history we were concerned primarily about ourselves. It was individual against individual. As society evolved, the family unit became important, and individuals defended members of their family unit against outside threats. With time our allegiances progressed from tribes to nations and eventually to races as identifiable units of concern. We defended ourselves against other races, but treated those within our own with love and respect. We even sold those of a different race into slavery. Ultimately, we fought the Civil War in an attempt to move upward in our ethical evolution to a concern for all races and humankind in general. As Nash points out, at the present we may be at the mammal level on the evolutionary ladder. We are concerned, for example, about the preservation of the whales, a concern identified in Chapter 1. We all love dogs. But we will step on a cockroach if given the chance. We have not yet progressed to the ethical level labeled "animals."

Despite the craze a few years back to possess "pet rocks," we do not consider our environment, the earth, with the same respect that we reserve for the mammals that inhabit it, or for ourselves. We sell the earth. We kill it through bulldozing and erosion. We must continue to climb the evolutionary ladder, as a society and as individuals, if we are to survive. Primitive societies have an environmental ethic. They understand their close kinship to the earth and its creatures. There is a second part of the ladder, inverted in time, with primitive societies starting at the top. Somehow the "civilization" process appears to bring societies down the ladder to the point where self is the focus of ethics. Global education offers the perspective to continue society's climb back up that ladder. Translated into classroom activities, global education can provide the mechanism to achieve the holistic attitude toward the environment once held by primitive societies but lost through the ages as we have struggled to "protect" ourselves from what we perceived as a hostile environment. Most of the applications of science were made by technology to protect us from nature, to enclose us in a supposedly benign, artificially created environment. Science is now providing us with new perspectives, through our space exploits, through providing a better understanding of the biological and physical processes that surround us, and through elucidating our interrelationships with our natural environment. Science, then, as a component of global education, can help us to reach the highest rung on the ladder of the evolution of ethics, if we give it, and us, a chance.

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CHAPTER 9

Instructional Methods and Materials for Global Education

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Introduction

A compelling case for global education has been set forth in the previous chapters. The need for nurturing a global perspective among elementary and secondary students has been argued, and a charge to teachers and administrators to meet this need has been presented. The purpose of this chapter is to describe instructional methods that can be useful in carrying out that charge and to identify sources of supportive materials and services.

Instructional methods and materials can be considered realistically only in light of one's teaching goals. We will assume that the basic goal of global education is to cultivate in students a global perspective and to develop in them the knowledge, skills, and attitudes needed to live effectively in a world possessing limited natural resources and characterized by ethnic diversity, cultural pluralism, and increasing interdependence. Implicit in this assumption is that global education has both cognitive and affective dimensions. A number of key concepts—culture, change, interdependence, and perception, for example—clearly lie at the heart of a global perspective. Focusing on such concepts and the data supporting them, however, must be complemented by the cultivation of attitudes reflecting openmindedness, empathy for others, a respect for cultural diversity, and appreciation of differences if global education is to be more than a mere academic exercise. In addition, analytic skills involved in problem solving and decision making must be developed. It is goals such as these with which this chapter is concerned. The chapter does not spell out a step-by-step global education curriculum nor does it describe all instructional methods available to teachers. Rather, it presents examples of selected methods that have proven effective with students on the assumption that creative teachers can adapt them for use with their classes and will design similar methods and materials of their own.

Global Education in the Curriculum

As implied by the authors of the preceding chapters global education should not be viewed as the private domain or responsibility of any one teacher or academic area. Nor should it be equated with discreet subjects such as history, Spanish, or geography. Rather, the subject matter of global education comes from a wide range of disciplines and permeates the total curriculum. It can be a part of all subject areas and can be studied in a wide variety of ways. Global education should be viewed as pervasive—a thread that runs throughout a student's entire school experience.

What would a "globalized" curriculum look like? How would it differ from the standard elementary and secondary curriculum with which we are familiar? Although relatively few prototypes of comprehensive world centered programs have been developed to date, the Alcott Elementary School on Chicago's North Side is an example of a school dedicated to creating a global perspective in its pupils. The Alcott program is described by John Cogan, Associate Professor of Education at the University of Minnesota, as follows:

> Each year a global theme or organizing concept is chosen. Then the students and staff work toward intergrating the theme into all aspects of the curriculum—social studies, reading, mathematics, literature, language arts, science, music, art, and physical education. Each class may choose to approach the theme in its own way, but the organizing concepts remain the central focus throughout the year. Themes for the past several years have included "It's A Small Small World" (1973-74), "The Storyteller and the Development of Folklore of People Around the World" (1974-75), "Bicentennial" (1975-76), and "Reading as a means to Global Understanding" (1976-77).
>
> The program includes all children in the school from the headstart classes through the 8th grade, the EMR, learning disabled, and those from the English as a second language program. The variety of activities taking place throughout the year is overwhelming. Children research and play games native to other countries; research their own ethnic heritage; prepare food of the various background nationalities of the students; learn songs from around the world; research customs, traditions, the holidays of other lands; plant seeds from different countries and study their growth in Chicago's climate; learn dances from around the world in physical education classes; engage in creative writing projects; read stories from other lands; and study about storytellers and their role in society, both now and in the past. Thus, Alcott's global education program involves all areas of the elementary curriculum.[1]

Even though global education is rapidly gaining acceptance in American education, it is unlikely that many schools in the near future will structure their curricula around international, cross-cultural themes as comprehensively as has Alcott School in Chicago. Some schools might well add an entirely new course on global matters or replace a more traditional course with a new one reflecting international concerns. Rarely, however, will the total curriculum be altered in one fell swoop. Rather, efforts to change the curriculum during the next several years likely will be somewhat piecemeal and largely dependent upon the efforts of individual teachers and administrators. Nevertheless, a beginning can be made. A commitment to global education by a single teacher might well lead to its acceptance by an entire department. Enthusiastic commitment by members of a department could in turn pave the way to the infusion of a global perspective throughout a school's total curriculum.

One logical way to introduce a world view to the curriculum is to integrate global topics into existing courses through units and lessons that have already been adopted. At the elementary level, for example, a study of environmental problems could be broadened from an analysis of local concerns to include a study of the ecosystem as a worldwide phenomenon. In a high school government course a unit on the American court system could be enriched by a study of human rights throughout the world. In a health class a study of nutrition could be expanded to include an inquiry into problems related to feeding the world's population. In an English class a study of American literature could be enhanced by concurrently dipping into literature from other cultures that addresses similar themes from different perspectives. (Please refer back to Dean Haenicke's treatment of "The Teaching of Literature" in Chapter 2.)

A word of caution seems advised. Although new units and courses on international and cross-cultural topics are important and should be encouraged, global education will have minimal impact if it is viewed as merely another entry competing with traditional subjects for space in an already overcrowded curriculum. (Professor Mayer acknowledges the "tight time constraints of the existing curriculum" in the preceding chapter.) By the same token, if the effort is limited to isolated bits of time and energy in the form of such activities as "world studies week" or "foreign culture day," the effect on students will likely be fleeting. In order for global education to become an integral part of the curriculum, teachers must seize every opportunity to add a global dimension to their teaching as a matter of course and to reinforce their students' expanding view of the world whenever possible.

If classroom teachers are to play a key role in introducing a global perspective to the curriculum, they themselves must cultivate a world view and recognize the complexities of living in an age of increasing interdependence and cross-cultural contact. As much as possible they should serve as living examples of the enlightened citizen they are attempting to produce. However, a commitment by a teacher to global education, no matter how lofty, will make little difference in the classroom unless it is complemented by action. But where does a teacher begin? What instructional methods can one draw on in carrying out world centered education? What resources or organizations are readily available to help?

Fortunately, internationally focused teaching materials are being published at a rapidly increasing rate, and support for teachers who want to introduce a global perspective to the curriculum is readily at hand. The remainder of this chapter will be devoted to suggestions regarding methodology and helpful sources of materials and services.

Examples of Selected Instructional Methods

The decision to use a particular teaching method is based upon one's assumptions regarding the role of the teacher, the role of the student, the nature of content, and the nature of the learning process. The methods and materials described below reflect a commitment on the part of the author to inquiry-oriented teaching. That is, it is assumed that the primary goal of education is to develop intellectually autonomous individuals who buttress a commitment to rationality with skills, understandings, and attitudes requisite to thoughtful inquiry. Inquiry-oriented teaching invites active participation in learning on the part of the student as opposed to passive ingestion of other people's ideas and collections of facts. In turn, it requires that a teacher do everything possible to stimulate thought and to encourage a free interchange of ideas in an atmosphere in which doubt is prized and students' points of view are courteously and fairly entertained. Content in the inquiry-oriented classroom is viewed less as an end in itself than as the raw material out of which understanding is forged. Data are ferreted out, analyzed, and used in the process of resolving doubt and in the pursuit of answers to the perplexities that surround us.

It cannot be guaranteed, of course, that the instructional methods presented here will free students of parochialism and ethnocentric attitudes or turn them into models of rationality. The methods can, however, serve as springboards for inquiring into global issues and for nurturing in students a sharpened awareness of the complexities of living in our increasingly interdependent world.

Simulations

During the past two decades simulations have become increasingly recognized as powerful teaching tools at virtually all grade levels. Simply stated, for our purposes simulations are operating models of social processes which have been simplified for study and analysis. Simulations cannot and should not be expected to present total reality. Rather, they are miniaturized representations of the significant factors of the process being studied, much like road maps that identify basic features of a terrain but delete the irrelevant.

Many simulations are available which can aid teachers seeking to introduce a global dimension in their classes. Three good examples are BaFá BaFá and Starpower, published by Simile II, and The Road Game, published by The Center for Global Perspectives.[2]

BaFá BaFá: BaFá BaFá is a simulation designed to introduce students to the nature of culture and to sensitize them to the feelings, anxieties, and misperceptions that are commonly a part of cross-cultural misunderstanding. In the simulation each student becomes a member of one of two different cultures, characterized by their own sets of rules and behaviors. Through observations and confrontations an attempt is made to identify and analyze the values, norms, customs, and reward systems of the other culture. BaFá BaFá is appropriate for use in grades 9 through 12, particularly in courses in anthropology, contemporary issues, and sociology.

Starpower: Starpower is a highly effective simulation in which a three-level society is created through an unequal apportionment of wealth and power. The exercise involves trading and bargaining, and the winners of the competition are the participants who accumulate the most points (wealth) by the end of the session. As a tool for introducing global concerns, it is particularly useful for surfacing issues regarding the distribution of the world's wealth and resources, the relationship between social systems and the behavior of individuals, and relations among members of different cultures, races, and social classes. Starpower can be used effectively in either junior or senior high sch

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The Road Game: The Road Game focuses on the concept of territoriality, and is especially useful when studying interaction among groups. Teams compete to build roads through each other's land, and, depending on the focus of study, the teams can role play nations, community interest groups, or ethnic groups competing for power and territory. It is an inexpensive, highly adaptable game that can be used to introduce global conflict and stress to students in grades 4 through 12.

Sources

BaFá BaFá, Starpower, and The Road Game are merely examples of the many commercially produced simulations with a global focus. Several catalogs describing the full range of simulations available have been published and can be of enormous help to teachers seeking appropriate simulations for their classes. Among the most widely used catalogs are:

Belch, Jean, *Contemporary Games, Volume II, Bibliography*. Detroit: Gale, 1974.

Horn, Robert E., *The Guide to Simulation/Games for Education and Training*. Cranford: Didactic Systems, 1977.

Klietsch, Ronald G., Wiegman, Fred B., and Powell, Jim R., Jr., *Directory of Educational Simulations, Learning Games, and Didactic Units*. St. Paul: Instruction Simulations, 1969.

Stadsklev, Ron, *Handbook of Simulation Gaming in Social Education (Part II: Directory)*. University: Institute of Higher Education Research and Services, 1975.

Twelker, Paul A., *Instructional Simulation Systems: An Annotated Bibliography*. Corvallis: Continuing Education Publications, 1969.

Teachers should not overlook the possibility of *their* designing globally oriented simulations for use in their classes. Several helpful sources for teachers who wish to try their hands at this task are:

Cruickshank, Donald R., *A First Book of Games and Simulation*. Belmont: Wadsworth Publishing Company, Inc., 1977.

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Marsh, Colin J., *Simulation Games in Action*. New York: Ashton Scholastic, 1979.

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Taylor, John L. and Walford, Rex, *Simulation in the Classroom*. London: Penguin, 1972.

Case Studies

Case studies are being used increasingly at both the elementary and secondary levels as a tool for bringing problems and issues of the "real world" into the classroom. They can be particularly effective for providing students with glimpses into human nature and conflict, and can serve as a means for personalizing the study of other cultures. A typical case study focuses on a human dilemma, presenting the students with conflicting points of view or interpretations of an event, a decision, or a situation. The students are challenged to examine the case, consider alternative ways of resolving the conflict, and justify their conclusions. By concentrating on selected dimensions of human experience, case studies can provide a glimpse of reality which adds to the students' perception of the world.

Case studies can take many forms and can be based on materials such as court cases, interpretive essays, memoirs, eyewitness accounts, and published narratives. One of the most effective types of cases is the vignette. Cases of this kind are brief word pictures which provide glimpses of a limited portion of human experience. No attempt is made to develop a plot or to present characters fully. Vignettes are especially useful for assessing students' perceptions regarding issues and for surfacing value conflicts among class members. Let us assume that a 6th grade class is studying the nature of culture and the ways in which frame of reference affects one's interpretation of events. The following vignette might be used.

> Linda . . . returned to her classroom after an active recess. She and her best friend, Sandi, had just finished a vigorous round of T-ball. Linda's teacher was preparing the class for the weekly test in current events.
>
> "Now, boys and girls," he began, "It's time to settle down. Go to your tables, pull out some paper, and answer the questions as I read them."
>
> The class quieted down. Midway through the test, he noticed Linda whispering.
>
> "All right, Linda! No talking during exams! Next time I catch you cheating, I'll take your test."
>
> He continued the questions. Then,
>
> "Linda, what's in that note you're passing to Sandi?"
>
> "Answers to the questions."
>
> "What! You've got to be kidding! You're not supposed to cheat!"
>
> "But, I'm," sputtered Linda, "I'm not cheating. Sandi doesn't know the answers and I'm . . ."
>
> "Yeah, sure, you're helping Sandi."
>
> He threw Linda's test in the wastebasket.[3]

After reading the case, the class could be asked questions such as the following: Do you approve of the teacher's actions? Why or why not? What would you have done if you had been the teacher? Why? Why might Linda have been giving answers to Sandi? What feelings might Linda have had about the incident? How might she now feel about the teacher? About school?

After discussing their reactions to the case class members can be asked if they are certain that Linda was cheating. Consider—Linda's full name is Linda Redcloud. She is a Seminole Indian who was raised in an extended family, consisting of her grandparents, parents, and six brothers and sisters. Above all, Linda was taught by her parents to share what she owned and to place the welfare of the family above her own. Excessive competition and selfishness for personal gain had no place in her family.

The discussion can then continue. Does the added information affect your analysis of the case? If so, how? Knowing what you do now, would you have dealt with the situation differently had you been the teacher? What does this case tell us about our communicating with and attempting to understand other people? What does the case suggest regarding the nature and influence of frame of reference on our behavior and perceptions? How does culture influence one's frame of reference? Can you think of instances when you might have been misunderstood or might have misunderstood someone else because of failure to communicate across cultures? What does this suggest to us about our dealing with people from around the world?

Two Methods for Analyzing Communication as a Global Phenomenon

Perhaps no other technological developments have served to link communities of the world in recent years more than those in the field of communications. The rapidity with which visual and oral messages can be sped around the earth is unprecedented in human history. One could not but be impressed with the on-the-spot television coverage of the unfolding drama during the freeing of the American hostages by Iran in January, 1981. At one point during those tense hours the ABC Television Network offered live a coordinated linkup of the hostages deplaning in Algiers accompanied by commentary by Peter Jennings in Frankfurt, Frank Reynolds in Washington, and family members of one of the hostages in San Diego. The implications of such an achievement are staggering. The technology involved is neutral, as Mayer has observed in Chapter 8; but the results of its use can be either beneficial or hazardous. Dramatic coverage of a damaging earthquake in Italy can result in an immediate outpouring of moral and financial support from around the world. On the other hand, sensationalistic reporting of an act of political terrorism even as it is occurring can result in public clamor for retaliation and confrontation far surpassing the import of the act itself.

Modern technology has resulted in our being bombarded daily with countless messages from all corners of the world. In a single television news program we might well be provided on-the-spot reports, albeit fleetingly, from the border of the Soviet Union and Afghanistan, the rugged countryside of El Salvador, Buckingham Palace in London, and the streets of Warsaw, Poland. Unfortunately, our capacity as individuals for dealing with this flood of messages has not necessarily kept pace with the technology that brings it to us.

One objective of global education should be to make students aware of the functioning of a global communications network and to prepare them to be critical consumers of messages they receive via that network. They should learn, for example, to distinguish fact from opinion, to be alert to biased reporting, and to recognize the effect of frame of reference on perception. Two effective methods for demonstrating potential pitfalls in communication are the Rumor Clinic, published by the Anti-Defamation League of B'Nai B'Rith,[4] and a cross-cultural analysis of television scheduling.

The Rumor Clinic: The Rumor Clinic kit includes a brief filmstrip depicting a variety of events. One frame, for example, shows a scene involving a street vendor with a pushcart from which a boy appears to be swiping a piece of fruit. In the background a policeman is running toward the pair while another boy lounges against a pole observing the action. Six students are assigned to be "reporters" and are sent out of the classroom. After the teacher introduces the demonstration to the rest of the class, one reporter is asked back into the room and is shown one of the scenes on the filmstrip for one minute. The first reporter then describes the scene to the second reporter. The second reporter recounts to the third what he has been told, and this is repeated until the story has been passed along to the final reporter. As one might expect, the distortions that develop during the passing of the "rumor" are revealing, and they serve effectively to launch discussion regarding the nature of rumors, sources of information, frame of reference, and the quality of evidence.

Television Analysis: Television puts us into instant communication with people from all parts of the world and plays a major role in the formation of the images we have of others. Television and films provide millions of people around the world with virtually the only information they receive about cultures and events in faraway places. Although some programs reflect sensitivity and balance, many offer representations out of which dubious stereotypes are developed. One way to alert students to this possibility is to have them analyze typical television schedules from other countries. The following program listings, for example, appeared during the summer of 1980 in newspapers in New Zealand and Australia:

New Zealand Herald

Auckland
June 24, 1980

Television Two

2:30 CROWN COURT, "Still Life with Feathers."
2:55 THE GOOD OLD DAYS. Music Hall Entertainment.
3:40 "SEVEN HILLS OF ROME" (1958)
Mario Lanza stars as an American singer who follows his nice Italian fiancee to Rome only to fall in love with a poor girl. Repeat.
5:25 M•A•S•H•. Hawkeye almost loses his sight after an explosion and is confined to the ward. Repeat.
5:55 NEWS
6:00 WKRP IN CINCINNATI. "Doctor's Daughters."
6:30 BIONIC WOMAN. The Six Million Dollar Man helps Jaime stop a missile threat to Los Angeles.
7:30 ROBIN'S NEST. Robin decides to fly the nest for warmer pastures, unaware that other plans are hatching.
8:00 HART TO HART. Jennifer's research into prostitution takes the Harts into a destructive, deadly underworld.
9:00 EYE WITNESS. Current Affairs.
9:30 THREE'S COMPANY. Jack tries to tell Larry that his bride-to-be has made a pass at him.
10:00 NEWS AT TEN
10:30 ON THE MAT. Professional Wrestling.
11:00 THE STREETS OF SAN FRANCISCO. A manhunt gets underway when a hotel is held under siege.
11:50 CLOSEDOWN

The Age
Melbourne
July 4, 1980
Channel 9
12:00 THE MIKE WALSH SHOW.
1:30 DAYS OF OUR LIVES.
2:30 THE YOUNG AND THE RESTLESS

2:55 NEWS
3:00 GENERAL HOSPITAL
3:30 SEARCH FOR TOMORROW
4:00 THE CURIOSITY SHOW (Programme for Children).
5:00 HERE'S LUCY
5:30 FAMILY FEUD
6:00 THE YOUNG DOCTORS
6:30 NEWS, SPORTS AND WEATHER
7:00 HAPPY DAYS. Noisy but generally watchable American comedy series. Tonight Fonzie's pigeon coop causes the roof to collapse on the Cunningham's garage.
7:30 THE MISADVENTURES OF SHERIFF LOBO. Noisy "good ol' boys" American comedy series starring Claude Akins. In tonight's episode Dean Martin tries to avoid becoming involved in local politics by refusing to entertain at a re-election rally for Lobo.
8:30 Movie—BAREFOOT IN THE PARK. A 1967 Neil Simon Comedy about newlyweds in a delapidated apartment in New York's Greenwich Village.
10:40 ADVANTAGE BORG. Documentary that looks at Bjorn Borg.
10:55 TENNIS-Direct satellite telecast from Wimbledon.

Many questions can be initiated by a review of the television schedules. For example: How would you characterize the American programs listed? What images of Americans and life in the United States might the programs present? Why might these particular programs be popular in New Zealand and Australia? What programming changes would you recommend in an attempt to present a balanced view of American life to New Zealanders and Australians? What misconceptions might we form about people from other countries by watching American television? By reading American newspapers? What steps can we take to avoid forming unfounded stereotypes of other people and cultures based upon information we receive via the mass media?

Follow-up activities can involve students' analyzing local television programming, films and newspapers to find what stereotypes are perpetuated by American media.

A Survey for Launching a Cross-Cultural Study

A logical starting point to study any foreign culture is with the "facts" and concepts currently held by the students. It is important to realize that often what we know is based on questionable stereotypes and misinformation. One effective way to demonstrate this fact is to present the students with an open-ended questionnaire designed to assess their present level of understanding of a culture to be studied. The following survey was designed to launch a unit on China. The less information provided by the teacher about the Chinese before distribution of the survey, the more revealing and fruitful will be the findings.

Survey on China

Please complete the following statements dealing with Chinese people living in The People's Republic of China. Your papers will not be graded.

1. I think that most Chinese are . . .
2. If I were to go to China, I would expect to see . . .

3. If Chinese students my age were to visit the United States they would be most surprised by . . .
4. Most Chinese people would like to be . . .
5. Most Chinese people would like to have . . .
6. Most Chinese people believe . . .

Please draw and color (if possible) two pictures to accompany this sheet: (1) a picture showing a typical scene in the daily life of a person your age in China (2) a picture showing some aspect of a typical day in the life of an American student of the same age.

Bear in mind that the students' statements and pictures are *starting* points for the study. They should be neither scorned nor taken lightly. Rather, they provide the stuff out of which a useful and interesting study can develop. In a sense, the statements can be viewed as hypotheses to be investigated as the students seek to find what the Chinese, or whomever they are studying, are *really* like. Questions to be pursued could be: How would you characterize your views of the Chinese? *Why* do you think you regard the Chinese this way? On what information and experiences did you base your statements? What were your sources of information? How can you judge if your information is valid or not? What impact might the media have had on your thinking? If we wanted to find out what the Chinese are really like how could we go about doing it?

Pursuit of answers to the final question could lead into a study of stereotyping. Such questions as these could be entertained: Why do people stereotype others? On what bases are stereotypes usually formed? In what ways might stereotyping be damaging? How were the stereotypes of the Chinese held by our class inaccurate? What could be the harmful effects of one's holding these stereotypes? What stereotypes of Americans might be held by the Chinese? On what bases would these stereotypes likely be formed? What other potentially harmful stereotypes can you think of? What might we do to avoid stereotyping people as we seek to understand them better?

A Method for Introducing the Concept of Ethnocentrism

One of the basic concepts students should come to comprehend as they grow in cross-cultural awareness is that of ethnocentrism. Glenn E. Lambert developed the following handout to be used with junior high school students as a means of introducing the concept. The handout provides a description of the Nodnelds, a fictitious group of people whose culture is foreign to the students.

The Nodnelds

The Nodnelds are a small group of people who live on a very large island near the equator. They are a friendly and peaceful people. They have no wars and do not believe in fighting other tribes.

Honesty, religion, and cooperation are the three most important characteristics of their culture. They believe in honesty so much that they punish anyone who lies, steals, and cheats by putting him or her to death.

If a person is accused of lying, stealing, or cheating he or she is taken to the Ragna, the head man. The Ragna prays to the fire-god and the god tells him if the person is guilty. If he or she is guilty, the god will shoot flames out of the mountain. The name of the fire-god is Krono. The Nodnelds believe Krono is the maker of all humans and that the Nodnelds are his favorite people. Krono, they believe, made them the perfect type of people.

They show their belief in cooperation by helping each other and other people on the island gather fruits, nuts, and berries, and hunt wild animals. Because they do not know how to plant and grow crops, they spend most of their time looking for food.

The men do all the hunting and are considered superior to women. The women have very few rights. They have to follow orders from the men. If any woman does not follow orders, she is not allowed to eat for two days.

It is the women's job to gather fruits, nuts, and berries, to carry home the wild animals which the men have killed, and to prepare the meals. The Nodnelds eat only one meal a day. That meal begins at sundown and lasts for several hours. Sometime before sundown the women begin to prepare this meal. They throw everything into a big pot and let it cook for an hour. When the food is cooked, it is put into the "eating pot" and all the people in the family eat out of this pot. They have no forks or spoons. They use their hands and fingers. To show that the meal is good, they chew loudly, burp, and belch. Licking their fingers is also a common practice. If an outsider ate a meal with a Nodneld family and ate very quietly and made no noise, the family would feel insulted. In addition to eating out of the same pot, everyone drinks out of the same water container.

The Nodnelds have several problems in their way of life. They do not always get the right foods and sometimes they suffer from an improper diet. When they get sick, they go to a medicine man who tells them to fast and pray to the firegod for help.

Soaps and deodorants are unheard of in the Nodneld culture, and this causes some problems. The people are usually dirty and sweaty and the only time they wash is when they swim in a river. Sometimes they wait so long between swims that their skin gets infected.

There are more women than men in this culture and this has led to the practice of polygamy. Polygamy means one man can have more than one wife. To the Nodnelds this is very normal; and if someone told them that a man was supposed to have only one wife, they would laugh at him and tell him that he was crazy.

To make sure that the tribe never gets too large for the limited food supply, the Nodnelds practice two things. One, they leave unwanted babies out in the forest to die and say that they are sending them back to Krono, who will take care of them until a later time. Two, when an old person is no longer useful to the tribe, they send him or her away to fast, pray to Krono, and die.

You are an anthropologist. You have been sent into this area to help these people. Write a report in which you answer the following questions:

1. How would you help the Nodnelds?
2. What would you do?
3. What changes, if any, would you make in the way they live?
4. Why would you make these changes?
5. If you would not make any changes, explain your reasons for this.
6. If you tried to make changes in the way they live and they did not want to go along with those changes, what would you do?[5]

Predictably, the students' ethnocentric attitudes will emerge during the follow-up discussion. Most students will be abhorred at the idea of letting infants and old people die. Otherw will consider the Nodnelds' failure to use soap or dedorants as dirty and disgusting. Some class members will probably think the group's eating habits and manners to be crude, vulgar, and unsanitary. Eventually, however, through discussion the students can come to realize that understanding the Nodnelds is not so much a matter of deciding if the tribe's values are right or wrong as much as it is recognizing that they are simply different. When that occurs, the students are well on their way to defining and comprehending the concept of ethocentrism.

Methods for Exploring Local-Global Linkages

Virtually all communities have many more global linkages than most students realize. Even the most "all-American" of cities and towns typically boast a variety of ethnic restaurants, stock the shelves of their stores with imported goods, and use in day-to-day living—often unknowingly—products of foreign-owned corporations. Sensitizing students to these international connections should be one of the goals of global education.

There are many approaches to exploring the global linkages of the local community. For example, students can be asked to inventory their own homes to find which household items have been imported from other countries or to identify the origins of products on the shelves of neighborhood stores. Local newspapers can be searched for evidence of global connections, and relevant items can be clipped and placed on a classroom bulletin board. Local television programs can be analyzed, and the amount of time devoted to international topics can be calculated. In short, the possibilities for studying local-global linkages are almost as numerous as the connections themselves. Following is a more detailed description of one method that has proved particularly effective in this type of study, followed by a brief account of two approaches to analyzing a community's international involvement as pioneered by Chadwick Alger, Professor of Political Science and Public Policy at The Ohio State University.

Searching the Yellow Pages: In this exercise the class is asked to analyze the yellow pages of the telephone directory for evidence of the community's global linkages. Working in small groups, the students gather data in a number of categories. One group, for example, might list restaurants having an international flair. A second group could identify manufacturers that appear to be internationally affiliated. Another group could seek out services (travel agencies, for example) having international connections.

After the students have developed their lists, they should identify the clues they used to determine that their connections were international. The class can then list and categorize the countries with which the local community has affiliations. A follow-up discussion could focus on questions such as these: Why have companies, restaurants, etcetera in our community developed international connections? In what ways do these relationships affect the quality of life in our community? How do the international affiliations affect our community financially, culturally, and socially? How has the pattern of international involvement in our community changed during the past fifty years? Twenty years? Why has this occurred? How involved do you think our community will be internationally fifty years from now? What is the basis for your prediction? What are the implications of your predictions?

Your Community in the World–The World in Your Community: In recent years significant work has been done in identifying and analyzing the international linkages of states and local communities and in developing instructional materials that illustrate and capitalize on these global connections. The original effort was conceptualized and launched under Chadwick Alger's leadership in a program entitled "Columbus in the World: The World in Columbus." Alger provides some insight into his motivation for initiating the project with the following observation:

> People everywhere are increasingly linked to global processes through the activities of daily life—as consumers of energy, commodities, and manufactured goods from abroad and as producers of goods for export. Every day we walk by, and even are involved in, banks, multinational corporations, and insurance companies that girdle the globe. We are treated by physicians educated in other countries. We are members of service clubs and religious organizations that link all continents. We enjoy a standard of living that has evolved out of technology based on scientific achievements of a global scientific enterprise. Ironically, although we live our lives in a sea of international transactions, most are not perceived. To this extent *we don't know where in the world we are.*[6]

One purpose of the Columbus in the World project was to identify and to encourage the use of local resources and expertise in enhancing the individual's development of self-reliance and personal responsibility for foreign policy. A part of the effort was to devise means by which students could be encouraged to discover "where in the world they are." The following materials are an outgrowth of the project and can be helpful in achieving that goal. They are available from Chadwick F. Alger, The Mershon Center of The Ohio State University, 199 West 10th Avenue, Columbus, Ohio 43201.

1. "A World of Cities: or Good Foreign Policies Begin at Home." A 50-page summary of the rationale and work of Columbus in the World; a diagnosis of Columbus as an international city; etc. Price: $1.00.
2. "Foreign Policy in Local Communities." A 20-minute filmstrip with script, discussion aid, teacher's guide, and synchronized tape. Price: $20.00.
3. "You and Your Community in the World." A learning package including discussion, exercise, and exemplary materials. 119 pages plus appendices. Price: $3.00.
4. "Your Community in the World/The World in Your Community." A detailed guide to the research methods used in Columbus along with all questionnaires, examples of data, etc., for use in investigating the international links in one's community. 78 pages plus appendices. Price: $5.00.

Several similar projects have spun off Columbus in the World, including "Kentucky in the World" (1977), "Minnesota in the World and the World in Minnesota" (1979), and "Indiana in the World" (1980). Information on each of these projects can be obtained from the departments of education in the states involved. "Ohio and the World" was published by the Ohio Council for the Social Studies in 1980 and is available from Michael J. Fuller, Teacher Education Department, Miami University, Oxford, Ohio 45056. Each project has produced a modestly priced handbook filled with instructional strategies and supportive materials that should prove enormously helpful to teachers striving to build a global perspective into their curricula.

Resources International: Another significant effort to capitalize on local-international linkages as a means for furthering global education is Resources International.[7] Established as a service of the Youth Education Committee of the International Council of Mid-Ohio, RI serves as a link between teachers in the Columbus area and locally based individuals with international experience who have volunteered to serve as resource people in the schools. Interested teachers contact the service by telephone to discuss their plans, and the RI coordinator puts them in touch with appropriate resource persons who can fulfill their requests. At present nearly 200 persons representing dozens of different countries and cultures are listed in RI's bank of volunteers. Information regarding RI can be obtained from the International Council of Mid-Ohio, 50 West Broad Street, Suite 2410, Columbus, Ohio 43215 (Telephone (614) 461-0632).

Methods for Exploring Personal-Global Linkages

One of the most effective ways of impressing on students that our lives are constantly and increasingly linked to the world is to have them analyze ways in which they personally are involved with the global community. The activities described below can be helpful in achieving this goal.

Who Among Us . . .? In this exercise students compile a list of countries with which they have had either direct personal experiences or indirect connections. Each student is given a copy of the following handout.[8]

Who Among Us . . .?

A. ________ has a personal link with a foreign country through:

LINKS COUNTRIES (List)

1. TRAVEL ________________________________

2. RELATIVES ________________________________

3. FRIENDS ________________________________

4. MEMBERSHIP IN A CLUB OR ORGANIZATION WITH FOREIGN BRANCHES OR MEMBERS ________________________________

5. SPEAKING A FOREIGN LANGUAGE ________________________________

6. COIN COLLECTING ________________________________

7. STAMP COLLECTING ________________________________

8. CORRESPONDENCE WITH PEN PAL ________________________________

9. HOSTING FOREIGNER IN YOUR HOME ________________________________

B. ________ has been a consumer of goods and services of foreign origin?

GOODS OR SERVICE COUNTRIES (List)

1. CAR ________________________________

2. CLOTHING ________________________________

3. JEWELRY ________________________________

4. FOOD ______________________________

5. TOYS ______________________________

6. APPLIANCES ______________________________

7. RECORDS BY FOREIGN PERFORMERS ______________________________

8. ENTERTAINMENT ______________________________

9. FURNITURE/HOME FURNISHINGS ______________________________

Students complete the forms individually and then compile their findings on a master form sketched on the chalkboard or projected as an overhead transparency. A large map of the world can be placed on the bulletin board, and, as countries are mentioned during the compiling exercise, pins can be used to mark them on the map. Pins of one color can be used for direct experiences and pins of another color for indirect connections.

When completed, the master list and the map will reflect visually and dramatically the international involvement of the class. A number of questions can be discussed: Do you notice any patterns in the way the pins are located on the map? If so, how do you account for them? Which countries appear to have the greatest impact on our class? Why? How would our lives be affected if suddenly all of the foreign influences we've identified were to disappear? What does this exercise suggest to us about interdependence in the world today?

Another follow-up activity could be to have students correspond with young people their age in other countries regarding mutual interests and questions of common concern. Names of pen pals can be secured from the following organizations:

League of Friendship
P.O. Box 509
Mt. Vernon, OH 43050
(Include a stamped, self-addressed envelope. Names can be provided for 139 countries. A fee of $.30 is charged for each name provided.)

Afro-Asian Center
C.P.O. Box 871
Kingston, NY 12401
(Names can be provided for 40 countries. A fee of $.70 is charged for each name provided.)

A Final Thought

In this chapter we have briefly considered the place of global education in the curriculum and have presented a sampling of instructional methods that can be used to add a global dimension to the curriculum. Bear in mind that the samples are merely that—examples of approaches one can take when teaching for a world view. It is left to each teacher—whether in history, the sciences, foreign language, or home economics—to devise strategies and materials reflecting his or her unique instructional style and geared to the special needs and interests of specific groups of students.

Whether global education will make a significant impact in American schools in the years to come remains to be seen. One thing, however, is certain. That is that interdependence among peoples of the world is a fact of life. Our global, cross-cultural ties are here to stay, and in fact will continue to expand at an ever increasing rate in the future. The arguments for a new educational effort designed to prepare young people for the challenge of living in today's changing world are convincing. It is our hope that this modest publication will contribute to the effort to meet that challenge.

Selected Sources of Materials and Services Related to Global Education

Organizations

The Center for Global Perspectives
218 East 18th Street
New York, NY 10003

The Center offers a wide range of publications and services to teachers. One of its most notable publications is *Intercom*, a very helpful quarterly journal which provides classroom tools, resources, and teaching ideas with a global perspective.

The Center for Teaching International Relations
University of Denver
Denver, CO 80208

The Center produces teaching materials for use in grades K-12 on such topics as food and hunger, population, ethnic heritage, and cultural awareness. It also provides consultant services and inservice activities to schools.

The Global Development Studies Institute
P.O. Box 522
14 Main Street
Madison, NJ 07940

The Institute provides curriculum outlines dealing with global studies for secondary schools and distributes *Memos*, a newsletter that annotates materials relevant to global education.

The Mid-America Program for Global Perspectives in Education
513 North Park Avenue
Indiana University
Bloomington, IN 47405

MAP works with schools and other agencies to improve offerings in global education. MAP has also developed a series of teaching units and resource guides dealing with cross-cultural topics that are available at a nominal fee.

National Council for the Social Studies
3615 Wisconsin Avenue, N.W.
Washington, D.C. 20016

NCSS has become increasingly involved in global education activities, including coverage of global topics in *Social Education* and the publication of an *International Social Studies Directory*. In addition, several sub-groups within the Council, such as the International Activities Committee and the Inter-Nation Exchange Special Interest Group, are playing an active role in the area of global education.

Periodicals and Newsletters

Atlas World Press Review—Presents articles, cartoons, and editorials translated from the world press. Published monthly by World Press Company, 230 Park Avenue, New York, NY 10017.

The Bridge—A journal of cross-cultural affairs. Includes reprints from the popular press, original articles, and a people-to-people classified ad section. Published quarterly by the Center for Research and Education, 2010 East 17th Avenue, Denver, CO 80206.

Development Forum—A newspaper that covers such topics as disarmament and dvelopment, economic development, environmental issues, and population. Published monthly by the Center for Economic and Social Information, United Nations, Palas des Nations, CH-1211, Geneva 10, Switzerland.

Focus on Asian Studies—A quarterly newsletter containing teaching ideas, book reviews, news items, and information related to Asian Studies. Published by the Service Center for Teachers of Asian Studies, The Ohio State University, 29 West Woodruff Avenue, Columbus, OH 43210.

Global Education—A tri-weekly letter that explores issues and alternatives in international/global education. Written and published September through April by Robert G. Hanvey, Box 1064, Bloomington, IN 47402.

Global Perspectives—An information exchange newsletter that focuses on developments in global education. Published monthly—October through May—by Global Perspectives in Education, Inc., 218 East 18th Street, New York, NY 10003.

Headline Series—A series of booklets that focus on issues and developments in various parts of the world, including Africa, Latin America, the U.S.S.R., and the Middle East. Published five times each year by the Foreign Policy Association, 345 East 46th Street, New York, NY 10017.

Intercom—Mentioned above under Center for Global Perspectives.

Interculture News—A newsletter that provides up-to-date information regarding new books, records, and artifacts, primarily from Asia and Africa. Published by Interculture Associates, Incorporated, Box 277, Thompson, CT 06277.

Memos—Mentioned above under Global Development Studies Institute.

News and Notes on the Social Sciences—A newsletter containing articles, book reviews, sources, and teaching tips for social studies teachers. Published twice a year by the Coordinator for School Social Studies, 513 North Park Avenue, Indiana University, Bloomington, IN 47401.

Spectrum—A newsletter that examines significant foreign policy issues. Published bi-monthly by the Student Advisory Committee on International Affairs, 1717 Massachusetts Avenue, N.W., Suite 503, Washington, D.C. 20036.

Transition—A bi-monthly publication that deals with such topics as social justice, ecology, and economics. Published by the Institute of World Order, Inc., 1140 Avenue of the Americas, New York, NY 10036.

World Affairs Activities Newsletter—Contains news items and reports dealing with world affairs. Published monthly by the Society for Citizen Education in World Affairs, 1511 New Hampshire Avenue, N.W., Washington, D.C. 20036.

World Eagle—Contains reprints of maps, charts, documents, surveys, and brief articles on current global topics—suitable for creating fluid duplicator masters or overhead transparencies. Published monthly—except July and August—by World Eagle, Inc., 64 WashburnAvenue, Wellesley, MA 02181.

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Mehlinger, Howard D., Hutson, Harry, Smith, Victor, and Wright, B'Ann, *Global Studies for American Schools*. Washington, D.C.: National Education Association, 1979.

Millar, Jayne C., *Focusing on Global Poverty and Development: A Resource Book for Educators*. Washington, D.C.: Overseas Development Council, 1974.

Remy, Richard C., Nathan, James A., Becker, James M., and Torney, Judith V., *International Learning and International Education in a Global Age*. Washington, D.C.: National Council for the Social Studies, 1975.

Switzer, Kenneth A. and Mulloy, Paul T., *Global Issues: Activities and Resources for the High School Teacher*. Boulder: Social Science Education Consortium, 1979.

Tucker, Jan L., "Citizenship Education in a Global Context," *Trends in Social Education*, Vol. 24, No. 3, Spring, 1978.

NOTES

1. Cogan, John J., "Implementing Global Education in the Elementary School: A Case Study," *Social Education*, Vol. 42, No. 6, October, 1978, pp. 503-505.

2. The addresses of the publishers of the three simulations are: BaFá BaFá and Starpower — Simile II, 218 12th Street, P.O. Box 910, Del Mar, CA 92014; The Road Game—Center for Global Perspectives, 218 East 18th St., New York, NY 10003.

3. Garcia, Ricardo, *Fostering a Pluralistic Society Through Multi-Ethnic Education*. Bloomington: Phi Delta Kappa Educational Foundation, 1978, p. 5.

4. The address of the Anti-Defamation League is 315 Lexington Avenue, New York, NY 10016.

5. Lambert, Glenn E., "Teaching the Concept of Ethnocentrism," *Social Education*, Vol. 42, No. 5, May, 1978, pp. 408-409. Reprinted by permission of the author.

6. Alger, Chadwick, "Your Community in the World: The World in Your Community," *Global Perspectives*, October, 1979.

7. Gilliom, M. Eugene, Remy, Richard C., and Woyach, Robert, "Using the Local Community as a Resource for Global Education," *Teaching Political Science*, Vol. 7, No. 3, April, 1980, pp. 251-264.

8. Fuller, Michael J., *Ohio and the World*. Oxford, OH: Ohio Council for the Social Studies, 1980, p. 3.